PIONEER®
The Art of Entertainment

Service Manual

ORDER NO.
ARP2231

STEREO DOUBLE CASSETTE DECK RECEIVER

RX-741 KU

- **Refer to the service manual ARP2027, RX – 731/KU type.**

- **This manual is applicable to the RX – 741/KU types.**

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1. CONTRAST OF MISCELLANEOUS PARTS

NOTES:

- *Parts without part number cannot be supplied.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *Parts marked by "◉" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.*

The RX−741/KU type is the same as the RX−731/KU type with the exception of the following sections.

Mark	Symbol & Description	Part No.		Remarks
		RX−731/KU type	RX−741/KU type	
⊙	FRONT assembly	AWZ2793	AWZ3469	
	MULTI ROOM assembly	Non supply	Non supply	
	VR IND assembly	Non supply	Non supply	
	SHIELD assembly	Non supply	Non supply	
	SUB TRANS assembly	....	Non supply	
	Spectrum analyzer panel A	AAK1918	....	
	Spectrum analyzer panel B	AAK1937	....	
	Spectrum analyzer panel	....	AAK2156	
	Acrylic panel	AAK1911	....	
	PVC panel	....	AAK2163	
	Front panel	AMB1615	AMB1811	
	Packing case	AHD1839	AHD2050	
	Operating instructions (English)	ARB1246	ARB1299	

2. PCB's PARTS LIST

NOTES:

- *Parts without part number cannot be supplied.*
- *Parts marked by "◉" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *When ordering resistors, first convert resistance values into code form as shown in the following examples.*

Ex. 1 *When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47k ohm (tolerance is shown by J = 5%, and K = 10%).*

560Ω 56×10^1 561........................RD1/4PS$\boxed{5}\boxed{6}\boxed{1}$J
47kΩ 47×10^3 473........................RD1/4PS$\boxed{4}\boxed{7}\boxed{3}$J
0.5Ω 0R5...RN2H$\boxed{0}\boxed{R}\boxed{5}$K
1Ω 010...RS1P$\boxed{0}\boxed{1}\boxed{0}$K

Ex. 2 *When there are 3 effective digits (such as in high precision metal film resistors).*

5.62kΩ 562×10^1 5621......................RN1/4SR$\boxed{5}\boxed{6}\boxed{2}\boxed{1}$F

◉ FRONT ASSEMBLY (AWZ3469)

SEMICONDUCTORS

Mark	No.	Description	Parts No.
	IC101−104	OP−AMP IC	RC4558DXP
	IC105	GEQ FL DRIVER IC	LC7566
	IC51	LOGIC IC	SN74LS05N
	IC52	LOGIC IC	SN74LS03N
	IC53	TIMER/TUNER CONTROL μ−COM	PD4269
	Q101−110	TRANSISTOR	2SC1740SLN
	Q120	TRANSISTOR	RN1201
	Q51, 52	TRANSISTOR	DTA143ES
	Q53, 54	TRANSISTOR	RN2201
	Q56	TRANSISTOR	DTC124ES
	Q57	TRANSISTOR	RN2201
	Q58	TRANSISTOR	RN1201
	Q59	TRANSISTOR	RN2201
	Q60	TRANSISTOR	2SC1740S
	Q62	TRANSISTOR	RN1203
	D101−104	DIODE	1SS252
	D107−114	DIODE	1SS252
	D151−163	DIODE	1SS252
	D164, 165	ZENER DIODE	RD5.1ESB
	D166	DIODE	1SS252
	D51−55	LED	AEL1077
	D56	LED (RED)	AEL1038
	D57−60	DIODE	1SS252
	D61	ZENER DIODE	RD15ESB
	D62−65	DIODE	1SS252
	D67	ZENER DIODE	RD8.2ESB2
	D68	ZENER DIODE	RD5.1ESB
	D69	DIODE	1SS252
	D70	ZENER DIODE	RD7.5ESB
	D71, 72	DIODE	1SS252

SWITCHES

Mark	No.	Description	Parts No.
	S51−75	SWITCH	ASG1034

COIL

Mark	No.	Description	Parts No.
	L51	AXIAL INDUCTOR	LAU220K

CAPACITORS

Mark	No.	Description	Parts No.
	C101, 102	ELECTROLYTIC CAPACIT	CEJAR33M50
	C103, 104	CERAMIC CAPACITOR	CKDYX393M16
	C105, 106	AUDIO FILM CAPACITOR	CFTXA124J50
	C107, 108	CERAMIC CAPACITOR	ACG1021
	C109, 110	CERAMIC CAPACITOR	CKDYX393M16
	C111, 112	CERAMIC CAPACITOR	CKDYB392K50
	C113, 114	CERAMIC CAPACITOR	CKDYX153M16
	C115, 116	CERAMIC CAPACITOR	ACG1020
	C117, 118	CERAMIC CAPACITOR	CKDYB332K50
	C119, 120	CERAMIC CAPACITOR	ACG1019
	C121, 122	CERAMIC CAPACITOR	CCMSL820J50
	C123	ELECTR.CAPACITOR	CEAS101M16
	C124	ELECTR.CAPACITOR	CEAS220M25
	C127, 128	ELECTR.CAPACITOR	CEAS470M16
	C129, 130	CERAMIC CAPACITOR	CKDYX333M25
	C131	ELECTR.CAPACITOR	CEASR22M50
	C132	ELECTROLYTIC CAPACIT	CEASR15M50
	C133, 134	CERAMIC CAPACITOR	CKDYX103M16
	C135	ELECTR.CAPACITOR	CEASR22M50
	C136, 137	CERAMIC CAPACITOR	CKDYB332K50
	C138	ELECTR.CAPACITOR	CEASR22M50
	C139, 140	CERAMIC CAPACITOR	CKMYB102K50
	C141	ELECTR.CAPACITOR	CEASR22M50
	C142, 143	CERAMIC CAPACITOR	CKMYB331K50
	C144	ELECTR.CAPACITOR	CEASR22M50
	C145	CERAMIC CAPACITOR	CKMYB152K50
	C147, 148	ELECTR.CAPACITOR	CEAS470M10
	C149, 150	ELECTR.CAPACITOR	CEAS220M25
	C151, 152	CERAMIC CAPACITOR	ACG1016
	C153, 154	CERAMIC CAPACITOR	CKDYF103Z50
	C51	CERAMIC CAPACITOR	CKCYX473M25
	C52	ELECTR.CAPACITOR	CEAS4R7M50
	C53	CERAMIC CAPACITOR	CKCYF103Z50
	C54	ELECTR.CAPACITOR	CEAS100M50
	C55	ELECTR.CAPACITOR	CEAS470M16
	C56	CEA (47000/5.5V)	ACH1070
	C57	CERAMIC CAPACITOR	CKCYX473M25
	C58	ELECTR.CAPACITOR	CEAS470M16
	C59	ELECTR.CAPACITOR	CEASR22M50
	C60	ELECTR.CAPACITOR	CEAS100M50
	C61, 62	CERAMIC CAPACITOR	ACG1020
	C63	ELECTR.CAPACITOR	CEAS470M16
	C64	ELECTR.CAPACITOR	CEAS100M25
	C65	ELECTR.CAPACITOR	CEAS4R7M50
	C68	ELECTR.CAPACITOR	CEAS100M25

RESISTORS

Mark	No.	Description	Parts No.
	VR101−110	VARIABLE RESISTOR	ACU1032
	VR111	VARIABLE RESISTOR	ACS1052
	R190	RESISTOR ARRAY (100K)	RA8T104J
	R191	RESISTOR ARRAY (100K)	RA13T104J
	R192, 193	CARBON FILM RESISTOR	RD1/4PM391J
	R56	CARBON FILM RESISTOR	RD1/4PM821J
	R92	CARBON FILM RESISTOR	RD1/2PM181J
	R96	CARBON FILM RESISTOR	RD1/4PM562J
		Other resistors	RD1/8PM□□□J

OTHERS

Mark	No.	Description	Parts No.
	V102	FL TUBE	AAV1126
	V51	FL TUBE	AAV1070
	X51	CERAMIC RESONATOR	ASS1018
		LEAD WITH HOUSING (2P)	ADX1190
		REMOTE RECEIVER UNIT	AXX1010

MULTI ROOM ASSEMBLY

SWITCH

Mark	No.	Description	Parts No.
	S76	SLIDE SWITCH	ASH1009

CAPACITORS

Mark	No.	Description	Parts No.
	C66, 67	CERAMIC CAPACITOR	CKCYF103Z50

RESISTORS

Mark	No.	Description	Parts No.
		All resistors	RD1/8PM□□□J

OTHERS

Mark	No.	Description	Parts No.
		JACK	AKN1020

VR IND ASSEMBLY

SEMICONDUCTOR

Mark	No.	Description	Parts No.
	D66	LED (RED)	AEL1040

SHIELD ASSEMBLY

No parts are supplied with the SHIELD assembly.

SUB TRANS ASSEMBLY

TRANSFORMER

Mark	No.	Description	Parts No.
⚠	T51	POWER TRANSFORMER	ATT1159

NOTE)
The other assemblies are the same as the assemblies of RX−731/KU type.

No.

034

20K

R33M50

X393M16
A124J50

021
X393M16

B392K50
X153M16
020
B332K50
019

L820J50
101M16
220M25
470M16
X333M25

R22M50
R15M50

X103M16
R22M50
B332K50

R22M50
B102K50
R22M50
B331K50
R22M50

Mark	No.	Description	Parts No.
	C145	CERAMIC CAPACITOR	CKMYB152K50
	C147, 148	ELECTR.CAPACITOR	CEAS470M10
	C149, 150	ELECTR.CAPACITOR	CEAS220M25
	C151, 152	CERAMIC CAPACITOR	ACG1016
	C153, 154	CERAMIC CAPACITOR	CKDYF103Z50
	C51	CERAMIC CAPACITOR	CKCYX473M25
	C52	ELECTR.CAPACITOR	CEAS4R7M50
	C53	CERAMIC CAPACITOR	CKCYF103Z50
	C54	ELECTR.CAPACITOR	CEAS100M50
	C55	ELECTR.CAPACITOR	CEAS470M16
	C56	CEA (47000/5.5V)	ACH1070
	C57	CERAMIC CAPACITOR	CKCYX473M25
	C58	ELECTR.CAPACITOR	CEAS470M16
	C59	ELECTR.CAPACITOR	CEASR22M50
	C60	ELECTR.CAPACITOR	CEAS100M50
	C61, 62	CERAMIC CAPACITOR	ACG1020
	C63	ELECTR.CAPACITOR	CEAS470M16
	C64	ELECTR.CAPACITOR	CEAS100M25
	C65	ELECTR.CAPACITOR	CEAS4R7M50
	C68	ELECTR.CAPACITOR	CEAS100M25

RESISTORS

Mark	No.	Description	Parts No.
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	R56	CARBON FILM RESISTOR	RD1/4PM821J
	R92	CARBON FILM RESISTOR	RD1/2PM181J
	R96	CARBON FILM RESISTOR	RD1/4PM562J
		Other resistors	RD1/8PM□□□J

OTHERS

Mark	No.	Description	Parts No.
	V102	FL TUBE	AAV1126
	V51	FL TUBE	AAV1070
	X51	CERAMIC RESONATOR	ASS1018
		LEAD WITH HOUSING (2P)	ADX1190
		REMOTE RECEIVER UNIT	AXX1010

MULTI ROOM ASSEMBLY

SWITCH

Mark	No.	Description	Parts No.
	S76	SLIDE SWITCH	ASH1009

CAPACITORS

Mark	No.	Description	Parts No.
	C66, 67	CERAMIC CAPACITOR	CKCYF103Z50

RESISTORS

Mark	No.	Description	Parts No.
		All resistors	RD1/8PM□□□J

OTHERS

Mark	No.	Description	Parts No.
		JACK	AKN1020

VR IND ASSEMBLY

SEMICONDUCTOR

Mark	No.	Description	Parts No.
	D66	LED (RED)	AEL1040

SHIELD ASSEMBLY

No parts are supplied with the SHIELD assembly.

SUB TRANS ASSEMBLY

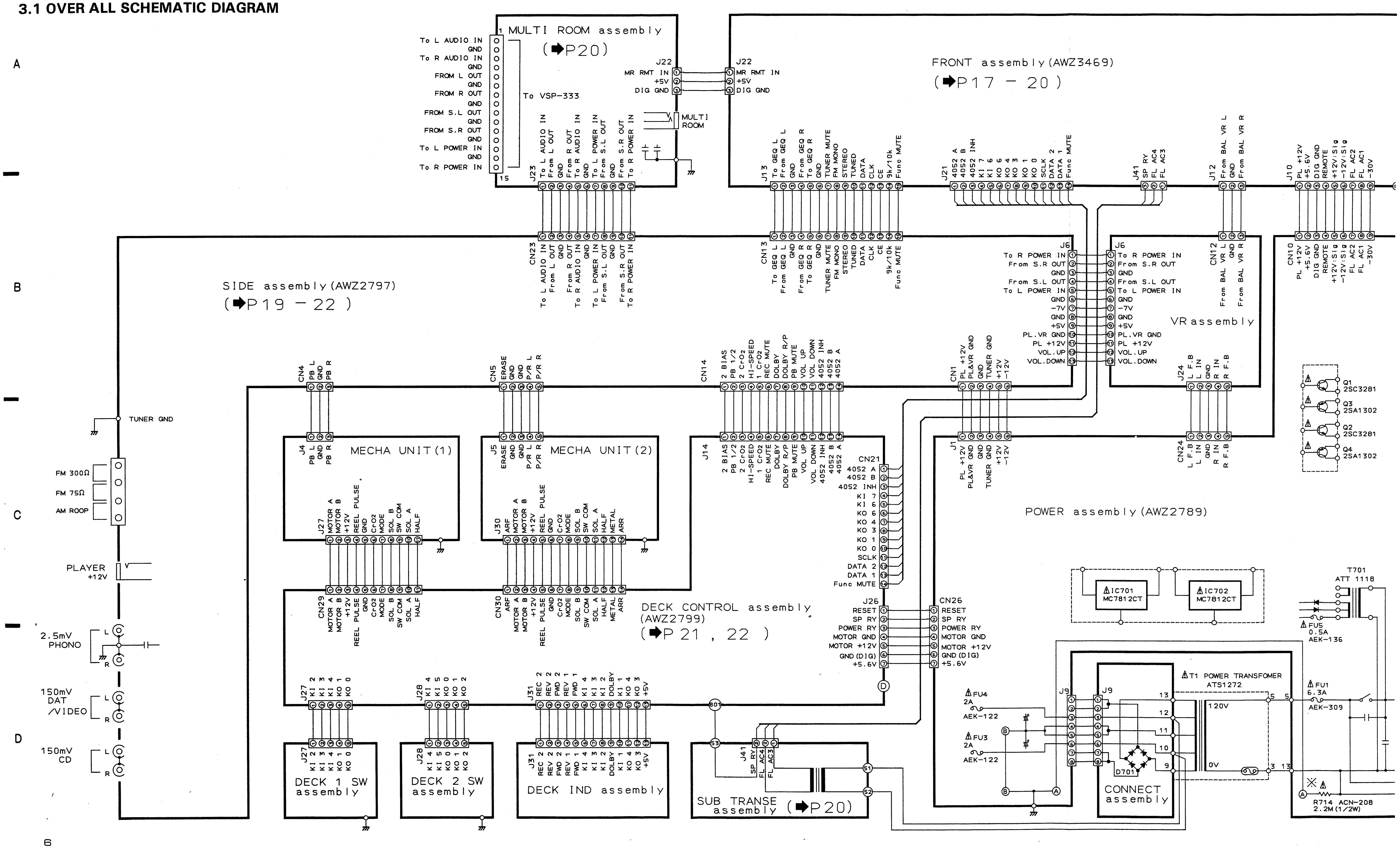
TRANSFORMER

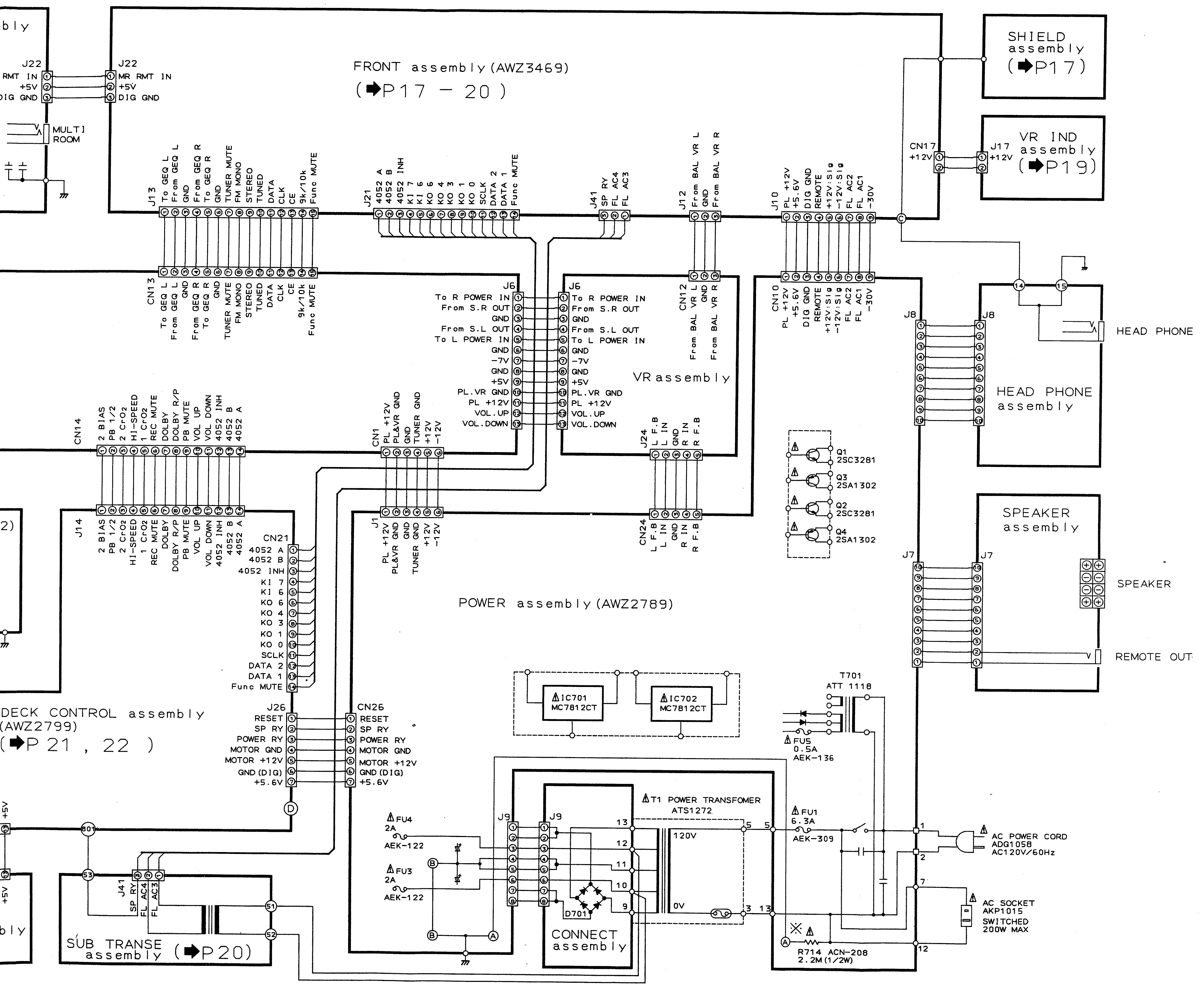
Mark	No.	Description	Parts No.
⚠	T51	POWER TRANSFORMER	ATT1159

NOTE)
The other assemblies are the same as the assemblies of RX−731/KU type.

3. SCHEMATIC AND P.C.BOARDS CONNECTION DIAGRAM

3.1 OVER ALL SCHEMATIC DIAGRAM


1
2
3
4
5
6
A
B
C
D
MULTI ROOM assembly
(➡P20)
To L AUDIO IN
GND
To R AUDIO IN
GND
FROM L OUT
GND
FROM R OUT
GND
FROM S.L OUT
GND
FROM S.R OUT
GND
To L POWER IN
GND
To R POWER IN
To VSP-333
J22
MR RMT IN
+5V
DIG GND
MULTI ROOM
J23
To L AUDIO IN
From L OUT
GND
From R OUT
To R AUDIO IN
GND
To L POWER IN
From S.L OUT
GND
From S.R OUT
To R POWER IN
FRONT assembly (AWZ3469)
(➡P17 − 20)
J13
To GEQ L
From GEQ L
GND
From GEQ R
To GEQ R
GND
TUNER MUTE
FM MONO
STEREO
TUNED
DATA
CLK
CE
9k/10k
Func MUTE
J21
4052 A
4052 B
4052 INH
KI 7
KI 6
KO 6
KO 4
KO 3
KO 1
KO 0
SCLK
DATA 2
DATA 1
Func MUTE
J41
SP RY
FL AC4
FL AC3
J12
From BAL VR L
GND
From BAL VR R
J10
PL +12V
+5.6V
DIG GND
REMOTE
+12V:Sig
−12V:Sig
FL AC2
FL AC1
−30V
CN23
CN13
CN12
CN10
SIDE assembly (AWZ2797)
(➡P19 − 22)
J6
To R POWER IN
From S.R OUT
GND
From S.L OUT
To L POWER IN
GND
−7V
GND
+5V
PL.VR GND
PL +12V
VOL.UP
VOL.DOWN
VR assembly
TUNER GND
FM 300Ω
FM 75Ω
AM ROOP
PLAYER
+12V
2.5mV
PHONO
150mV
DAT
/VIDEO
150mV
CD
L
R
CN4
PB L
GND
PB R
CN5
ERASE
GND
GND
P/R L
P/R R
CN14
2 BIAS
PB 1/2
2 CrO2
HI-SPEED
1 CrO2
REC MUTE
DOLBY
DOLBY R/P
PB MUTE
VOL UP
VOL DOWN
4052 INH
4052 B
4052 A
CN1
PL +12V
PL&VR GND
GND
TUNER GND
+12V
−12V
J24
L F.B
L IN
GND
R IN
R F.B
Q1
2SC3281
Q3
2SA1302
Q2
2SC3281
Q4
2SA1302
J4
MECHA UNIT (1)
J5
MECHA UNIT (2)
J14
CN21
J1
CN24
J27
MOTOR A
MOTOR B
+12V
REEL PULSE
GND
CrO2
MODE
SOL B
SW COM
SOL A
HALF
J30
ARF
MOTOR A
MOTOR B
+12V
REEL PULSE
GND
CrO2
MODE
SOL B
SW COM
SOL A
HALF
METAL
ARR
POWER assembly (AWZ2789)
CN29
CN30
DECK CONTROL assembly
(AWZ2799)
(➡P 21 , 22)
J26
RESET
SP RY
POWER RY
MOTOR GND
MOTOR +12V
GND (DIG)
+5.6V
CN26
RESET
SP RY
POWER RY
MOTOR GND
MOTOR +12V
GND (DIG)
+5.6V
IC701
MC7812CT
IC702
MC7812CT
T701
ATT 1118
FU5
0.5A
AEK-136
J27
KI 2
KI 3
KI 4
KO 1
KO 0
J28
KI 4
KI 5
KO 0
KO 1
KO 2
J31
REC 2
REV 2
FWD 2
REV 1
FWD 1
KI 4
KI 3
KI 2
DOLBY
KI 1
KO 4
KO 3
+5V
DECK 1 SW
assembly
DECK 2 SW
assembly
DECK IND assembly
SUB TRANSE
assembly (➡P20)
J41
SP RY
FL AC4
FL AC3
D
801
S3
S1
S2
FU4
2A
AEK-122
FU3
2A
AEK-122
B
A
J9
T1 POWER TRANSFORMER
ATS1272
120V
0V
13
12
11
10
9
5
3
D701
CONNECT
assembly
FU1
6.3A
AEK-309
R714 ACN-208
2.2M (1/2W)


4
5
6
7
8
9
A
B
C
D
FRONT assembly (AWZ3469)
(➡P17 − 20)
J22
RMT IN
+5V
DIG GND
MR RMT IN
MULTI ROOM
J13
To GEQ L
From GEQ L
GND
From GEQ R
To GEQ R
TUNER MUTE
FM MONO
STEREO
TUNED
DATA
CLK
CE
9k/10k
Func MUTE
CN13
J21
4052 A
4052 B
4052 INH
KI 7
KI 6
KO 6
KO 4
KO 3
KO 1
KO 0
SCLK
DATA 2
DATA 1
J41
SP RY
FL AC4
FL AC3
J12
From BAL VR L
From BAL VR R
CN12
J10
PL +12V
+5.6V
DIG GND
REMOTE
+12V:Sig
−12V:Sig
FL AC2
FL AC1
−30V
CN10
SHIELD assembly
(➡P17)
VR IND assembly
(➡P19)
CN17
J17
+12V
J6
To R POWER IN
From S.R OUT
From S.L OUT
To L POWER IN
−7V
+5V
PL.VR GND
PL +12V
VOL.UP
VOL.DOWN
VR assembly
J8
HEAD PHONE
HEAD PHONE assembly
CN14
J14
2 BIAS
PB 1/2
2 CrO2
HI-SPEED
1 CrO2
REC MUTE
DOLBY
DOLBY R/P
PB MUTE
VOL UP
VOL DOWN
CN1
J1
PL&VR GND
TUNER GND
+12V
−12V
J24
CN24
L F.B
L IN
R IN
R F.B
Q1
2SC3281
Q3
2SA1302
Q2
2SC3281
Q4
2SA1302
J7
SPEAKER assembly
SPEAKER
REMOTE OUT
CN21
POWER assembly (AWZ2789)
DECK CONTROL assembly
(AWZ2799)
(➡P 21, 22)
J26
CN26
RESET
SP RY
POWER RY
MOTOR GND
MOTOR +12V
GND (DIG)
+5.6V
IC701
MC7812CT
IC702
MC7812CT
T701
ATT 1118
FU5
0.5A
AEK-136
FU4
2A
AEK-122
FU3
2A
AEK-122
J9
T1 POWER TRANSFOMER
ATS1272
120V
0V
D701
CONNECT assembly
FU1
6.3A
AEK-309
AC POWER CORD
ADG1058
AC120V/60Hz
AC SOCKET
AKP1015
SWITCHED
200W MAX
R714 ACN-208
2.2M (1/2W)
SUB TRANSE assembly (➡P20)
S1
S2
S3
S01
+5V

1. RESISTORS:
Indicated in Ω, ¼W, ⅛W, ±5% tolerance unless otherwise noted k : kΩ, M : MΩ, (F) : ±1%, (G) : ±2%, (K) : ±10% (M); ±20% tolerance

2. CAPACITORS:
Indicated in capacity (μF)/voltage (V) unless otherwise noted p : pF
Indication without voltage is 50V except electrolytic capacitor.

3. VOLTAGE, CURRENT:
▭ : Signal voltage at (130 W + 130 W 8Ω)output (1kHz)
▭ : DC voltage (V) at no input signal
Value in ( ) is DC voltage at rated power.
⇦ mA : DC current at no input signal

4. OTHERS:
➡ : Signal route.
⊘ ; Adjusting point.
The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
※ marked capacitors and resistors have parts numbers.

This is the basic schematic diagram, but the actual circuit may vary due to improvements in design.

5.SWITCH

SIDE assembly

S401	BEAT CUT A(105k)/B(102k)

FRONT assembly

S51	CD
S52	VIDEO/AUX
S53	TAPE
S54	PHONO
S55	TUNER
S56	POWER
S57	ST12
S58	ST11
S59	ST10
S60	ST9
S61	ST8
S62	ST7
S63	ST6
S64	ST5
S65	ST4
S66	ST3
S67	ST2
S68	ST1
S69	MEMORY
S70	BAND
S71	F UP
S72	F DOWN
S73	CLOCK ADJ
S74	FM MONO
S75	SET

MULTI ROOM assembly

S76	VSP ON-OFF

DECK IND assembly

S851	PAUSE
S852	REC
S853	HISPEED COPY
S854	NORMAL COPY
S855	DOLBY OFF-ON
S856	RELAY ⇄ / ↻

DECK 1 SW assembly

S801	1 REV
S802	1 FWD
S803	1 REW
S804	1 FF
S805	1 STOP

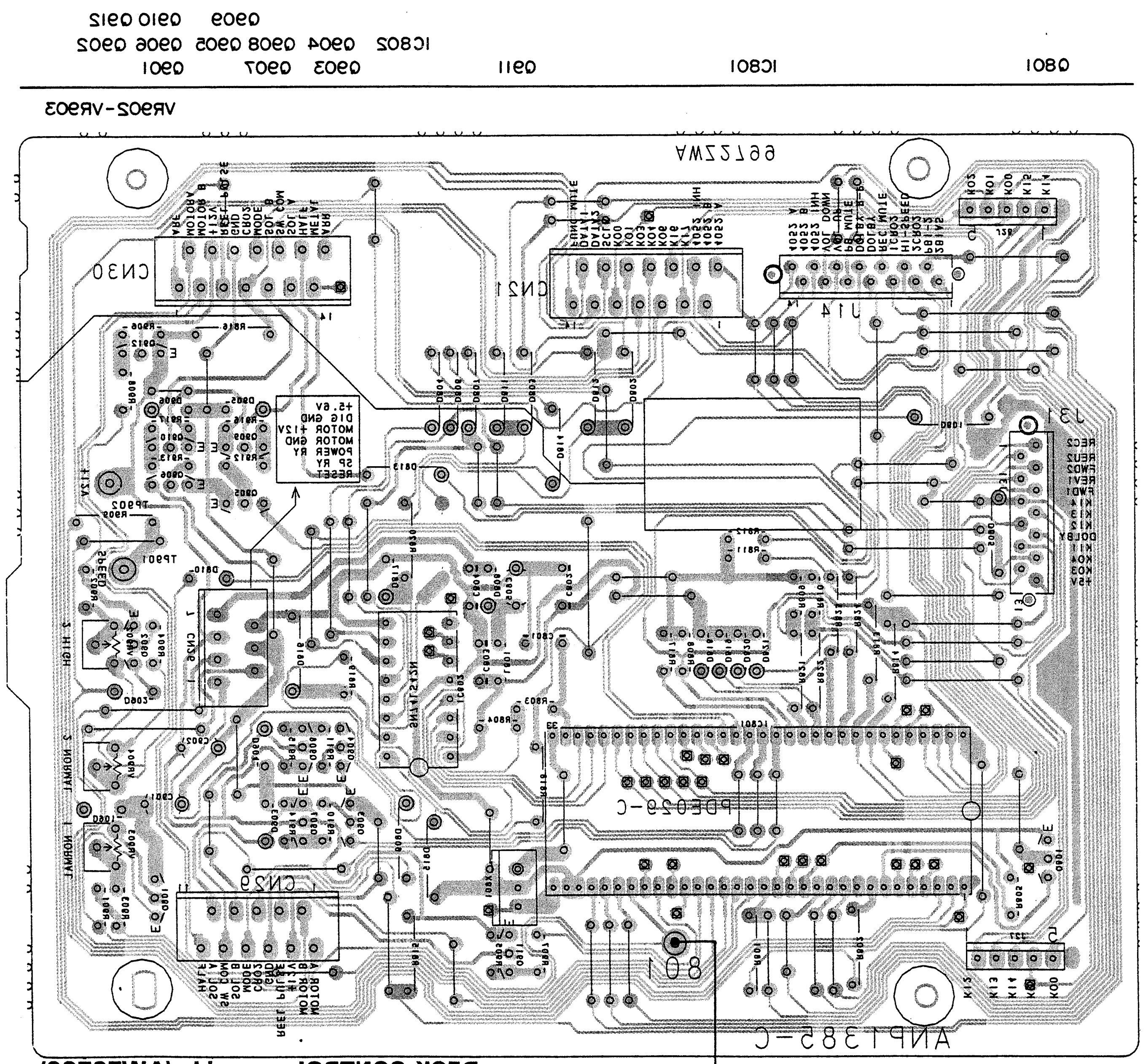
DECK 2 SW assembly

S806	2 REV
S807	2 REW
S808	2 STOP
S809	2 FWD
S810	2 FF

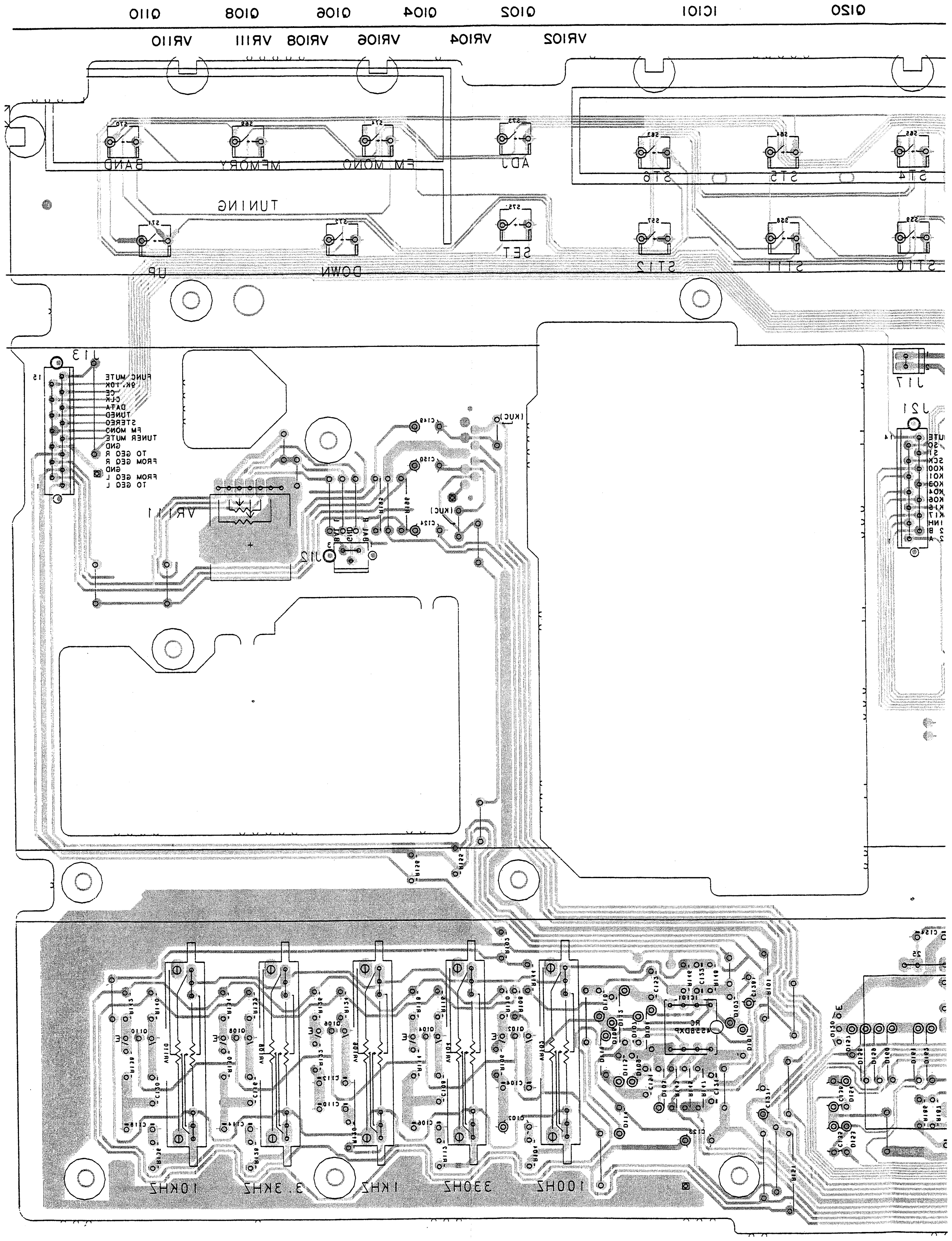
HEAD PHONE assembly

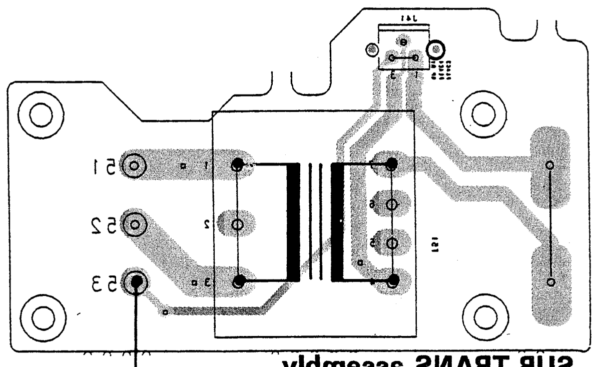
S601	SPEAKER A ON-OFF / B ON-OFF

The underline indicates the switch position.

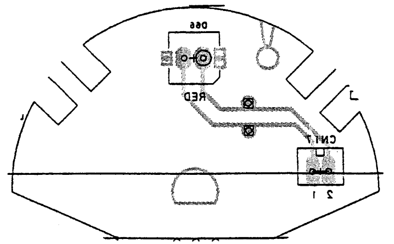

A
B
C
VR902-VR903
Q901 Q907 Q903 Q911 IC801 Q801
Q902 Q906 Q905 Q908 Q904 IC802
Q909 Q910 Q912
AWZ2799
CN30
CN21
J14
J31
CN29
PDE029-C
801
ANP1385-C
+5.6V
DIG GND
MOTOR +12V
MOTOR GND
POWER RY
SP RY
RESET

DECK CONTROL assembly (AWZ2799)


Q120 IC101 Q102 Q104 Q106 Q108 Q110
VR102 VR104 VR106 VR108 VR111 VR110
BAND
MEMORY
FM MONO
ADJ
ST6
ST5
ST4
TUNING
UP
DOWN
SET
ST12
ST11
ST10
J13
J17
J21
VR111
J12
FUNC MUTE
TUNED
STEREO
FM MONO
TUNER MUTE
GND
TO GEQ R
FROM GEQ R
FROM GEQ L
TO GEQ L
10KHZ
3.3KHZ
1KHZ
330HZ
100HZ

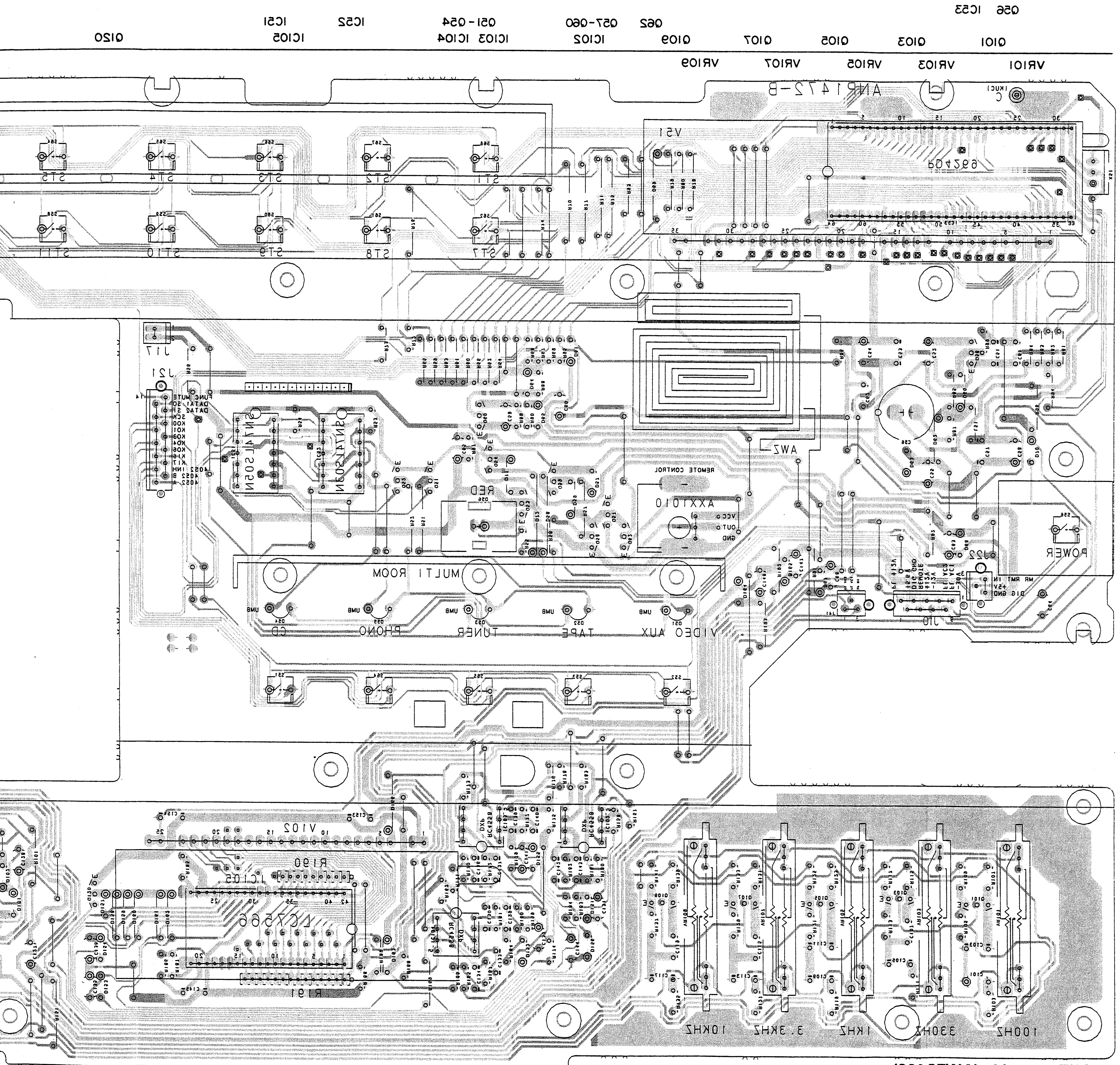

D
S1
S2
S3
J41

SUB TRANS assembly

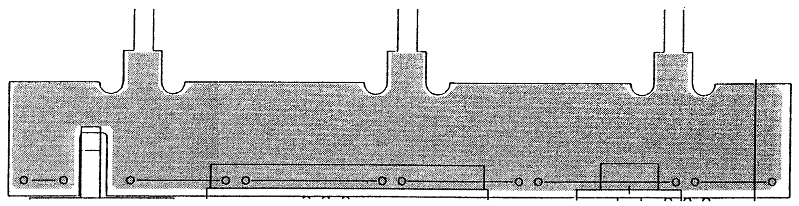

D66
RED
CN17

VR IND assembly

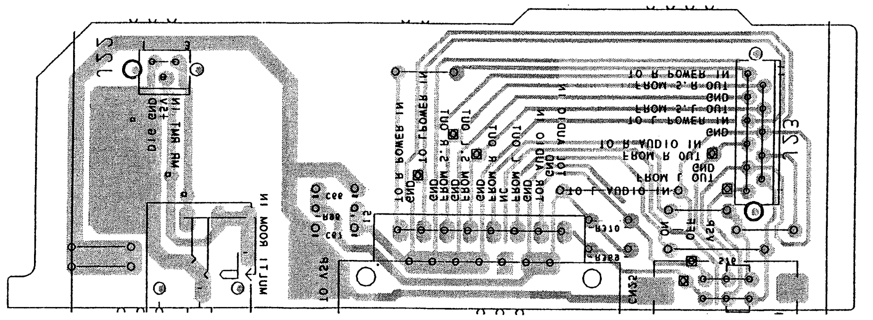
This P.C.B. connection diagram is viewed from the foil side.


7
6
5
4
3
2
1
Q120
IC51
IC105
IC52
Q51-Q54
IC103 IC104
Q57-Q60
IC102
Q62
Q109
Q107
Q105
Q103
Q101
Q56 IC53
VR109
VR107
VR105
VR103
VR101
ANP1472-B
V51
ST15
ST14
ST13
ST12
ST11
ST11
ST10
ST9
ST8
ST7
J17
J21
AWZ
RED
REMOTE CONTROL
AXX1010
MULTI ROOM
POWER
J22
J10
CD
PHONO
TUNER
TAPE
VIDEO AUX
V102
IC105
R190
R191
100HZ
330HZ
1KHZ
3.3KHZ
10KHZ

FRONT assembly (AWZ3469)



SHIELD assembly


MULTI ROOM
IN RMT RM
IN

MULTI ROOM assembly

A
B
C
D

3.2 P.C.BOARDS CONNECTION DIAGRAM

NOTE

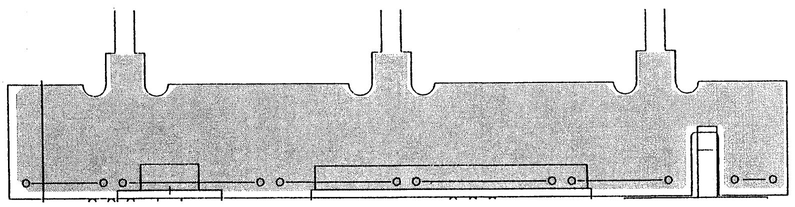
1. This P.C.B connection diagram is viewed from the parts mounted side.
2. The parts which have been mounted on the board can be replaced with those shown with the corresponding wiring symbols listed in the following Table.

P.C.B. pattern diagram indication	Corresponding part symbol	Part Name
E Q504	E or E	Transistor
Q215	or	Radiator type transistor
D203	D203	Diode
R237	R237	Resistor
C513	+	Capacitor (Polarity)
C518		Capacitor (Non-polarity)

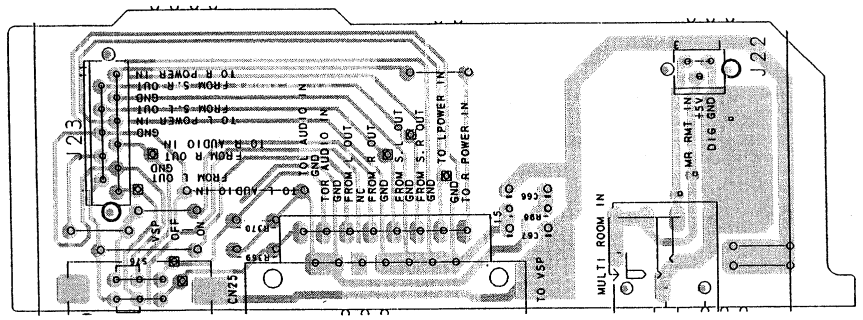
Others

P.C.B. pattern diagram indication	Part Name
IC	IC
S	Switch
RY	Relay
L	Coil
F	Filter
VR	Variable resistor or Semi-fixed resistor

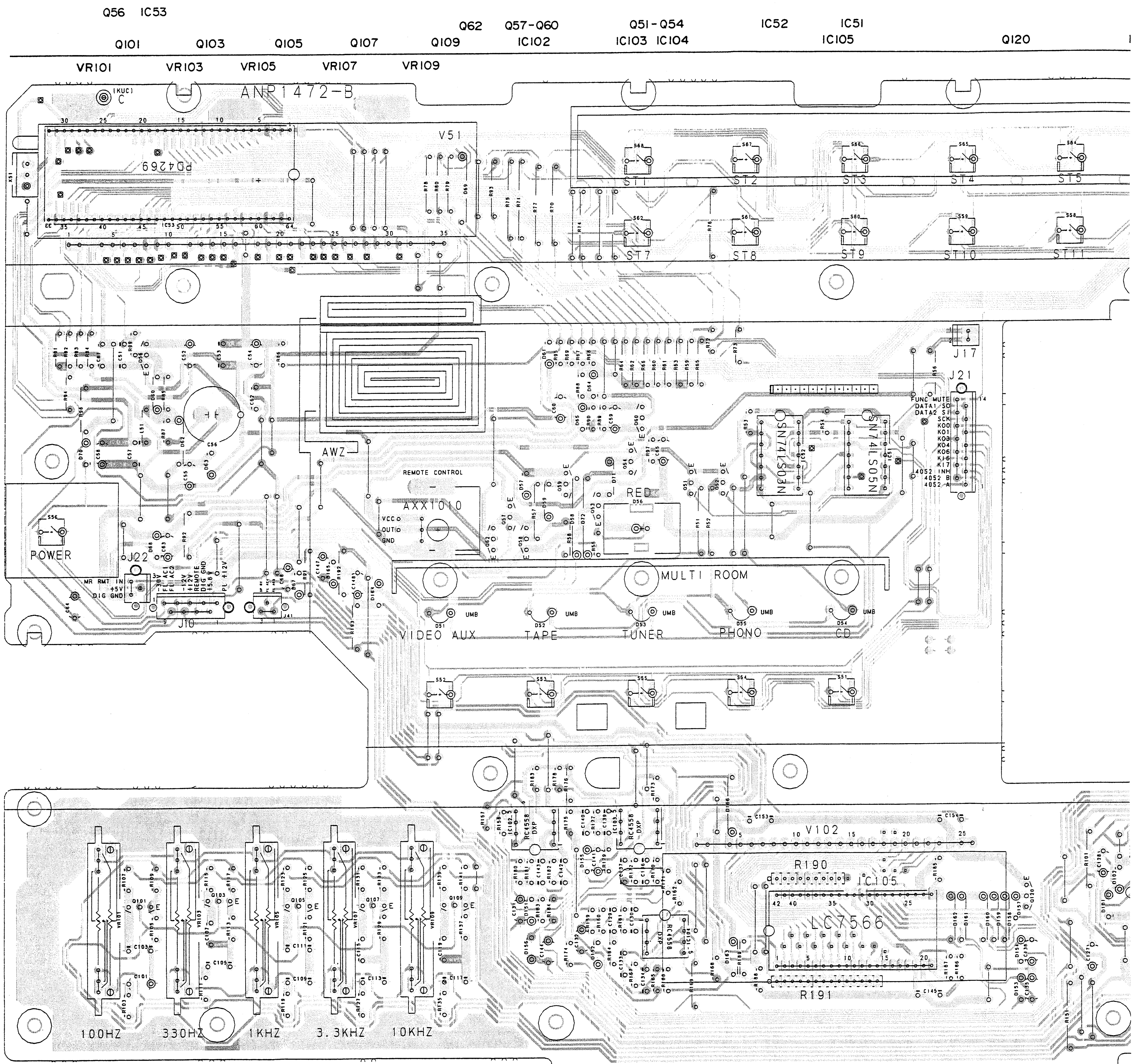
3. The capactor terminal marked with ◎(double circles) shows negatine termianl.
4. The diode terminal marked with ◎(double circles) shows cathode side.
5. The transistor terminal to which E is affixed shows the emitter.



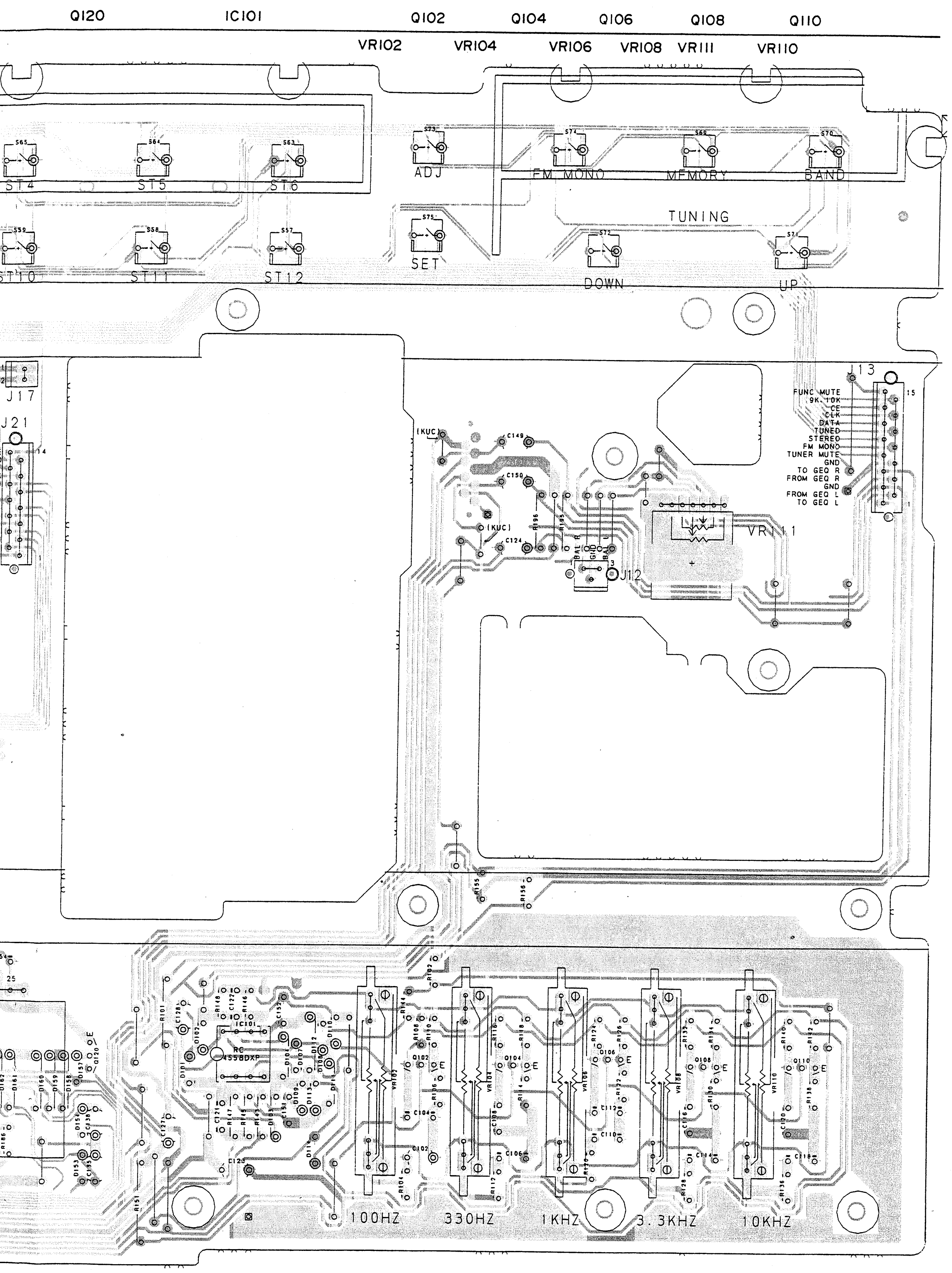
SHIELD assembly

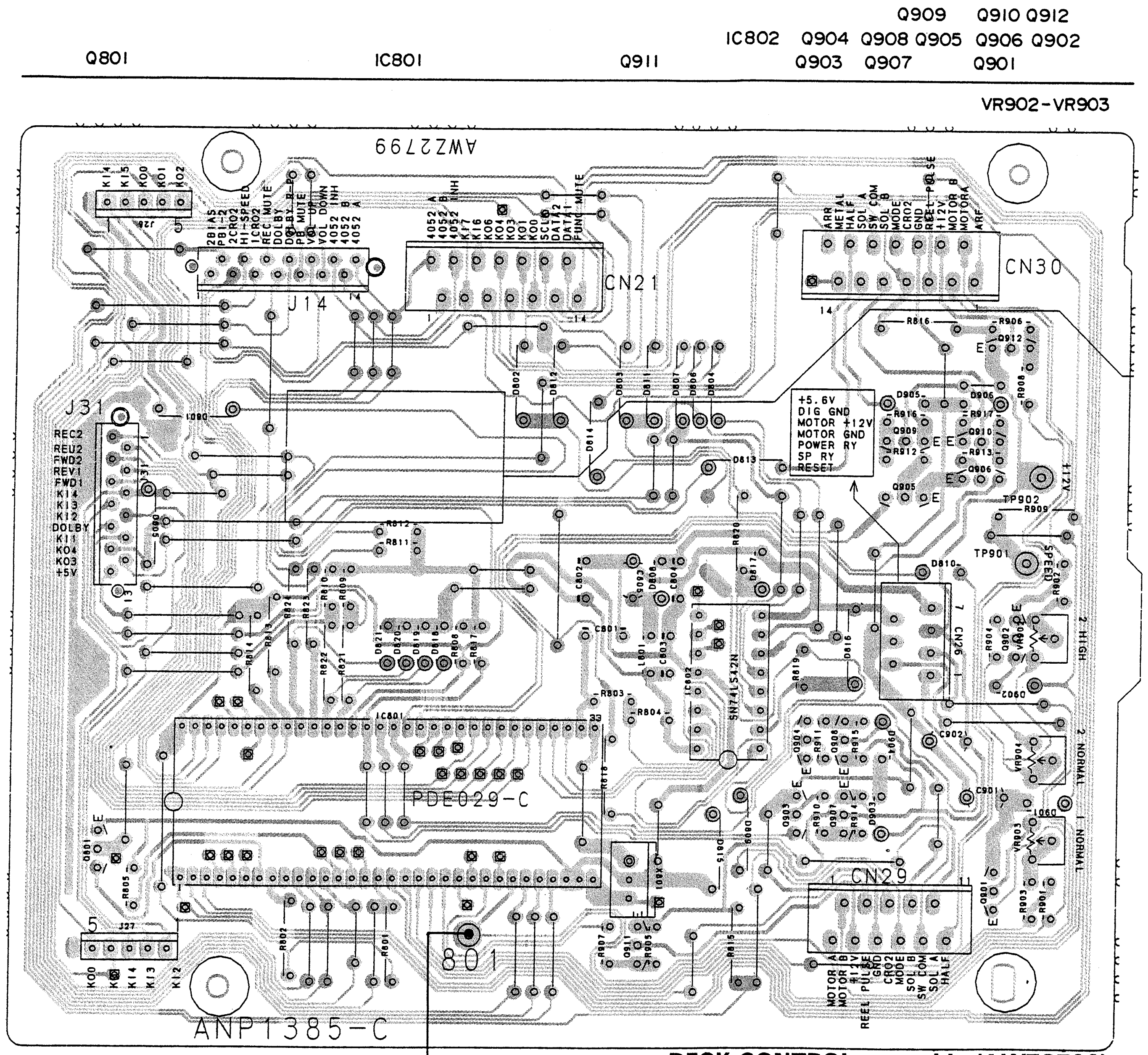

J23
J22
TO R POWER IN
FROM S.R OUT
GND
TO L POWER IN
FROM S.L OUT
GND
TO R AUDIO IN
FROM R OUT
TO L AUDIO IN
FROM L OUT
GND
MR RMT IN
+5V
DIG GND
TO VSP
MULTI ROOM IN
CN25

MULTI ROOM assembly

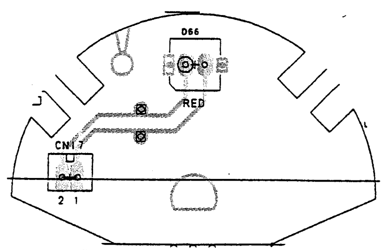

Q56 IC53
Q62 Q57-Q60 Q51-Q54 IC52 IC51
Q101 Q103 Q105 Q107 Q109 IC102 IC103 IC104 IC105 Q120
VR101 VR103 VR105 VR107 VR109
ANP1472-B
PD4269
V51
ST1 ST2 ST3 ST4 ST5
ST7 ST8 ST9 ST10 ST11
J17
J21
FUNC MUTE
DATA1 SO
DATA2 SI
SCK
SN74LS03N
SN74LS05N
AWZ
REMOTE CONTROL
AXX1010
VCC
OUT
GND
RED
POWER
J22
MR RMT IN
+5V
DIG GND
J10
J41
MULTI ROOM
VIDEO AUX
TAPE
TUNER
PHONO
CD
V102
R190
IC105
LC7566
R191
RC4558
DXP
100HZ
330HZ
1KHZ
3.3KHZ
10KHZ

FRONT assembly (AWZ3469)

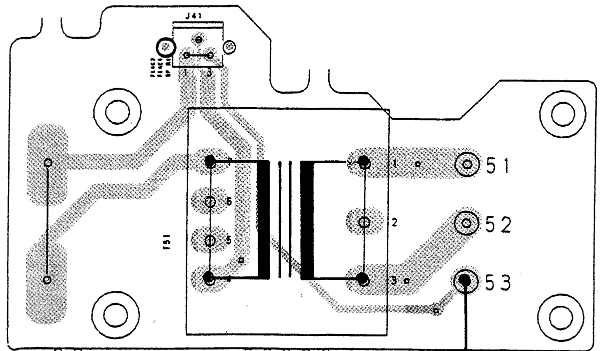

Q120
IC101
Q102
Q104
Q106
Q108
Q110
VR102
VR104
VR106
VR108
VR111
VR110
ST4
ST5
ST6
ADJ
FM MONO
MEMORY
BAND
TUNING
ST10
ST11
ST12
SET
DOWN
UP
J17
J21
J13
J12
VR111
100HZ
330HZ
1KHZ
3.3KHZ
10KHZ


Q801
IC801
Q911
IC802
Q904
Q903
Q908
Q907
Q905
Q909
Q910
Q912
Q906
Q902
Q901
VR902-VR903
AWZ2799
J14
CN21
CN30
J31
CN26
CN29
J27
PDE029-C
SN74LS42N
801
ANP1385-C
TP901
TP902

DECK CONTROL assembly (AWZ2799)

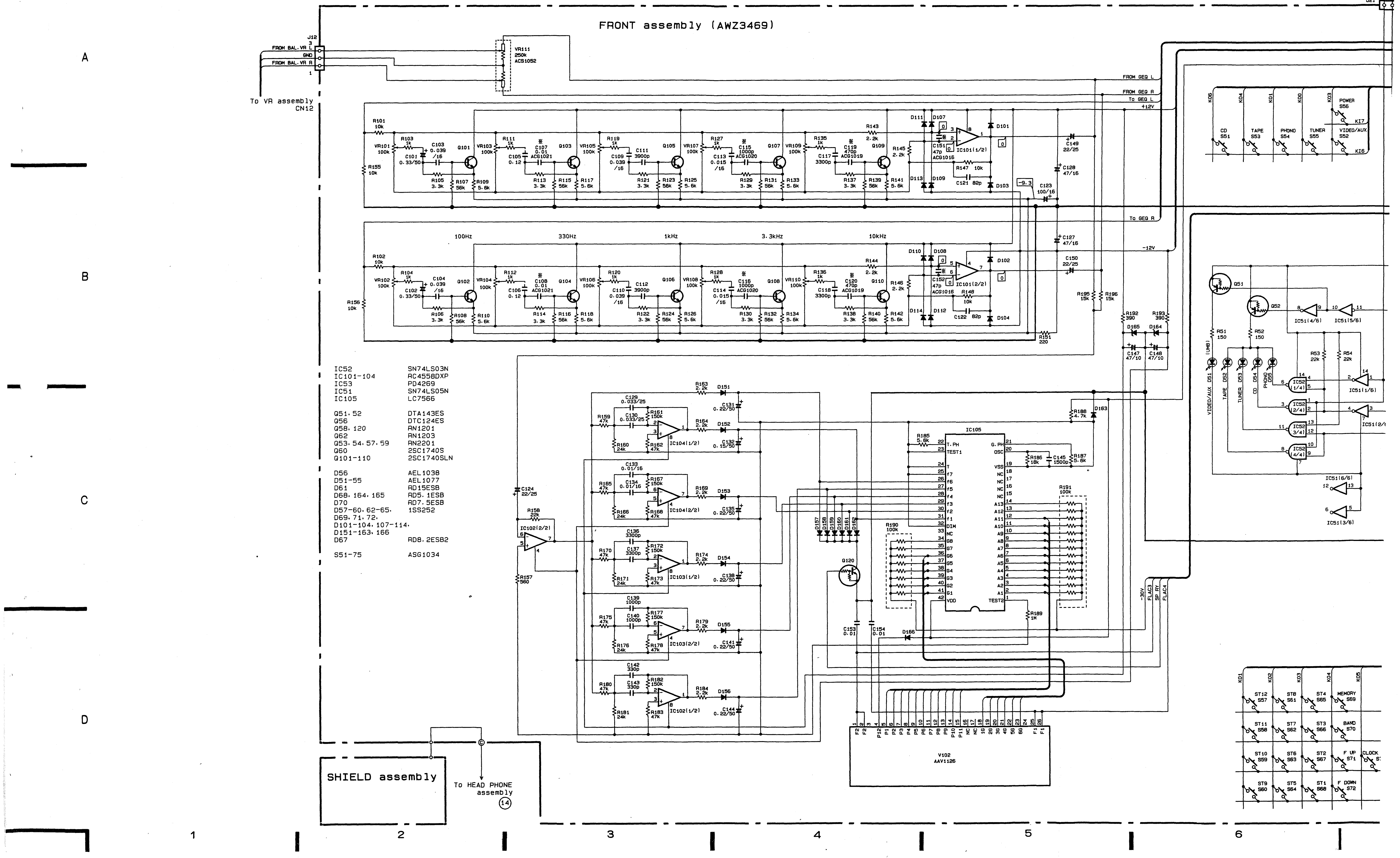

D66
RED
CN17

VR IND assembly

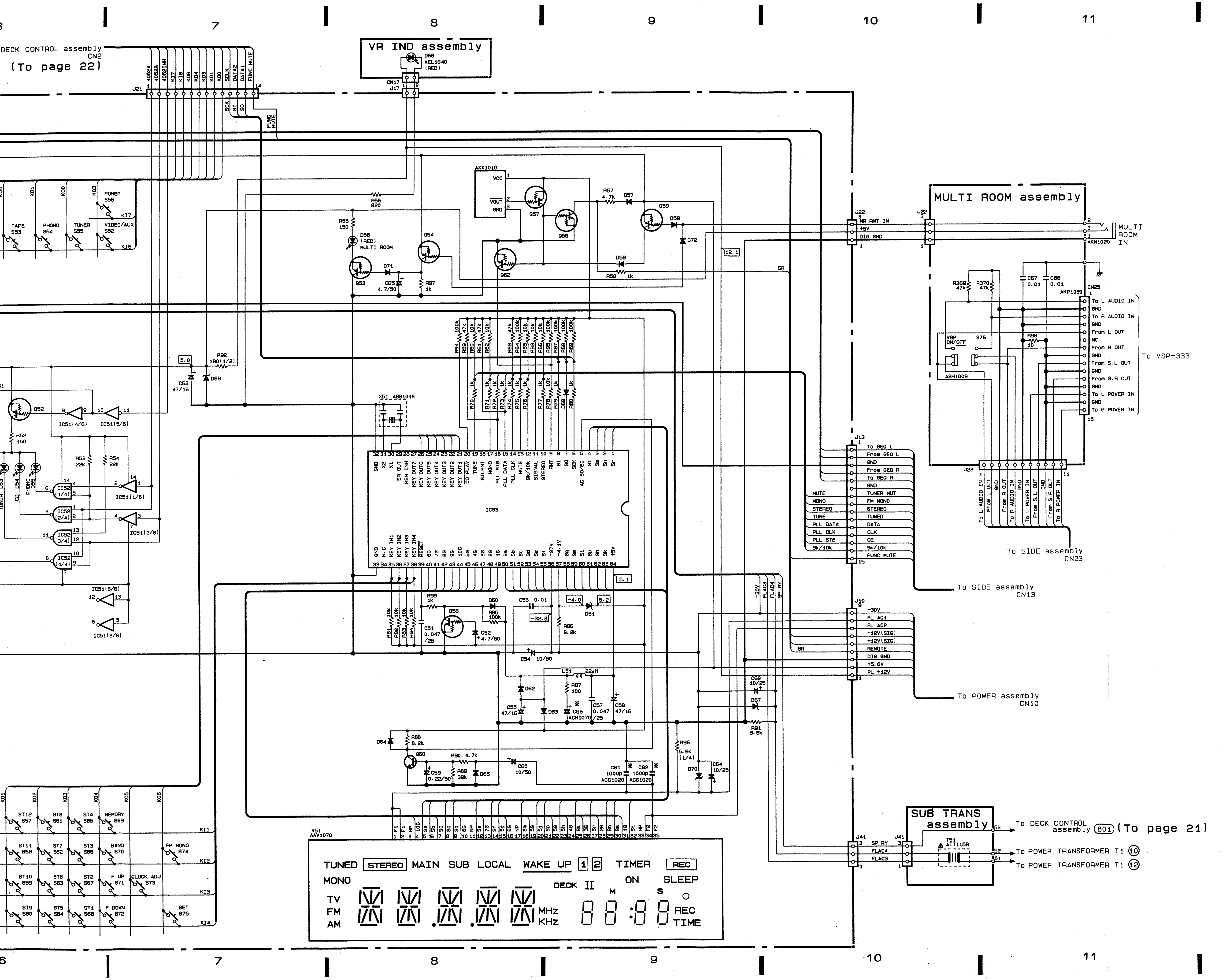


SUB TRANS assembly

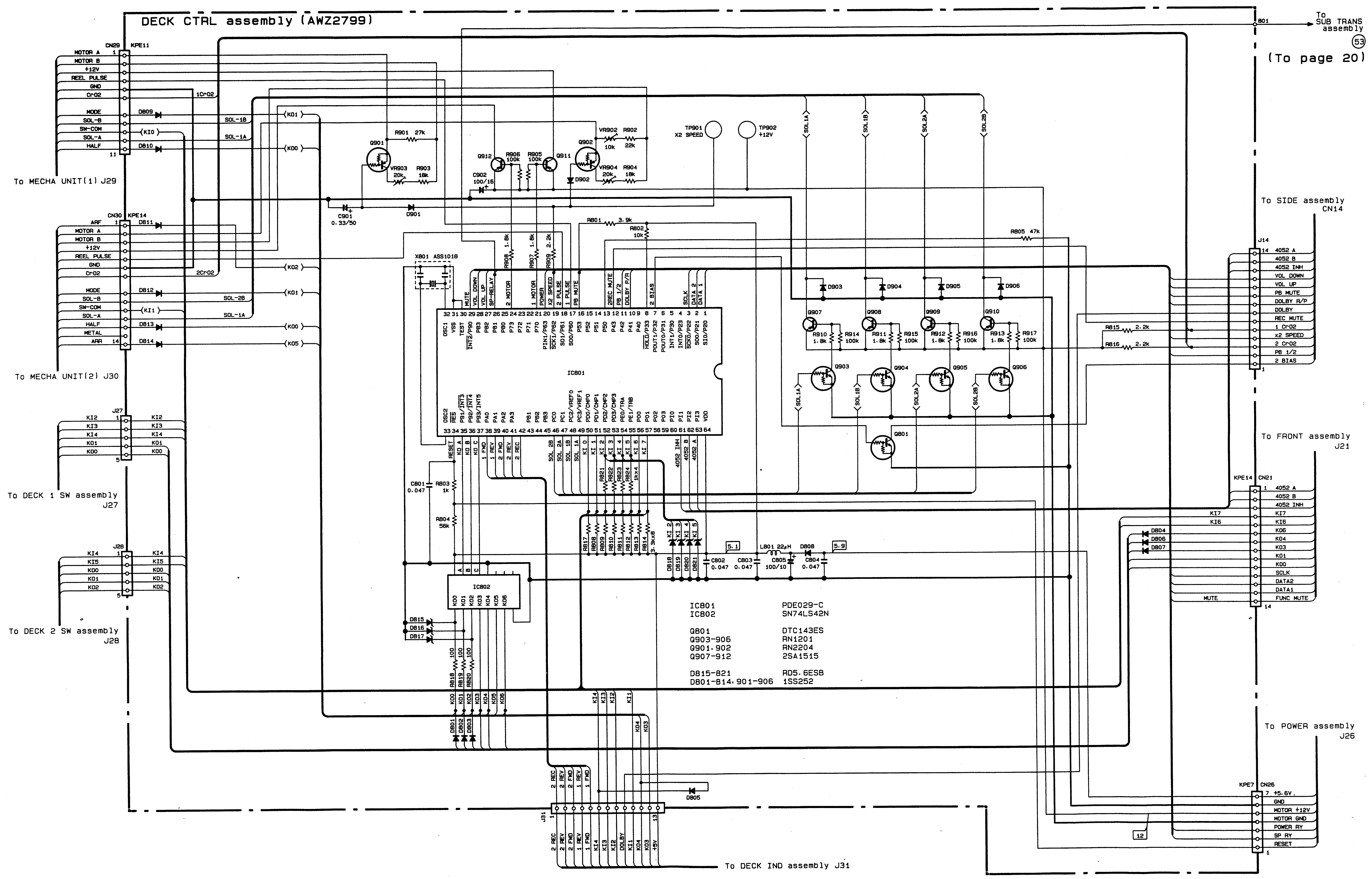
3.3 SCHEMATIC DIAGRAM FOR FRONT (AWZ3469), MULTI ROOM, VR IND and SHIELD assembly


To DECK CONTROL assembly CN2
(To page 22)
FRONT assembly (AWZ3469)
To VR assembly CN12
FROM BAL. VR L
GND
FROM BAL. VR R
VR111 250k ACS1052
FROM GEQ L
FROM GEQ R
To GEQ L
To GEQ R
+12V
-12V
100Hz
330Hz
1kHz
3.3kHz
10kHz
IC101(1/2)
IC101(2/2)
IC102(2/2)
IC102(1/2)
IC103(1/2)
IC103(2/2)
IC104(1/2)
IC104(2/2)
IC105
V102 AAV1126
CD S51
TAPE S53
PHONO S54
TUNER S55
VIDEO/AUX S52
POWER S56
VIDEO/AUX D51
TAPE D52
TUNER D53
CD D54
PHONO D55
MEMORY S69
BAND S70
F UP S71
F DOWN S72
CLOCK
SHIELD assembly
To HEAD PHONE assembly
⑭
1
2
3
4
5
6
A
B
C
D

IC52	SN74LS03N
IC101-104	RC4558DXP
IC53	PD4269
IC51	SN74LS05N
IC105	LC7566
Q51, 52	DTA143ES
Q56	DTC124ES
Q58, 120	RN1201
Q62	RN1203
Q53, 54, 57, 59	RN2201
Q60	2SC1740S
Q101-110	2SC1740SLN
D56	AEL1038
D51-55	AEL1077
D61	RD15ESB
D68, 164, 165	RD5.1ESB
D70	RD7.5ESB
D57-60, 62-65, D69, 71, 72, D101-104, 107-114, D151-163, 166	1SS252
D67	RD8.2ESB2
S51-75	ASG1034


DECK CONTROL assembly CN2
(To page 22)
VR IND assembly
D66 AEL1040 (RED)
CN17
J17
J21
4052A
4052B
4052INH
KI7
KI6
KO6
KO4
KO3
KO1
KO0
SCK
DATA2
DATA1
FUNC MUTE
SCK SI SO
FUNC MUTE
AXX1010
VCC
VOUT
GND
Q57
Q58
Q59
R57 4.7k
D57
D58
D72
D59
R58 1k
Q62
Q54
R56 820
R55 150
D56 (RED) MULTI ROOM
Q53
D71
C65 4.7/50
R97 1k
POWER S56
KI7
TAPE S53
PHONO S54
TUNER S55
VIDEO/AUX S52
KI6
R92 180(1/2)
5.0
C63 47/16
D68
Q52
R52 150
IC51(4/6)
IC51(5/6)
R53 22K
R54 22K
IC52 (1/4)
IC52 (2/4)
IC52 (3/4)
IC52 (4/4)
IC51(1/6)
IC51(2/6)
IC51(6/6)
IC51(3/6)
TUNER D53
CD D54
PHONO D55
X51 ASS1018
IC53
GND X2 X1 SR OUT REM IN4 KEY OUT7 KEY OUT6 KEY OUT5 KEY OUT4 KEY OUT3 KEY OUT2 KEY OUT1 CD PLAY TUNE SILENT MONO PLL STB PLL DATA PLL CLK MUTE 9K/10K SIGNAL STEREO RMT SI SO SCK AC 50/60 St Sm Sn Sr
GND N.C KEY IN1 KEY IN2 KEY IN3 KEY IN4 RESET
-27V -4.1V +5V
5.1
R94 R59 R60 R61 R62 R63 R64 R65 R66 R67 R68 R69 R95
R70 R71 R72 R73 R74 R75 R76 R77 R78 R79 R80 D69
R81 R82 R83 R84
R99 1k
Q56
D60
R85 100k
C51 0.047/25
C52 4.7/50
C53 0.01
-4.0
5.2
D61
-32.8
R86 8.2k
C54 10/50
L51 22μH
D62
R87 100
C55 47/16
D63
C56 ACH1070
C57 0.047/25
C58 47/16
D64
R88 8.2k
Q60
R90 4.7k
C59 0.22/50
R89 39k
D65
C60 10/50
C61 1000p ACG1020
C62 1000p ACG1020
R96 5.6k (1/4)
D70
C64 10/25
C68 10/25
D67
R91 5.6k
12.1
SR
J22
MR RMT IN
+5V
DIG GND
MULTI ROOM assembly
AKN1020
MULTI ROOM IN
R369 47k
R370 47k
C67 0.01
C66 0.01
CN25 AKP1059
To L AUDIO IN
GND
To R AUDIO IN
GND
From L OUT
NC
From R OUT
GND
From S.L OUT
GND
From S.R OUT
GND
To L POWER IN
GND
To R POWER IN
To VSP-333
VSP ON/OFF
S76
R98 10
ASH1009
J23
To SIDE assembly CN23
J13
To GEQ L
From GEQ L
GND
From GEQ R
To GEQ R
GND
TUNER MUT
FM MONO
STEREO
TUNED
DATA
CLK
CE
9K/10K
FUNC MUTE
MUTE
MONO
STEREO
TUNE
PLL DATA
PLL CLK
PLL STB
9K/10K
To SIDE assembly CN13
J10
-30V
FL AC1
FL AC2
-12V(SIG)
+12V(SIG)
REMOTE
DIG GND
+5.6V
PL +12V
SR
-30V FLAC3 FLAC4 SP RY
To POWER assembly CN10
SUB TRANS assembly
J41
SP RY
FLAC4
FLAC3
T51 ATT1159
To DECK CONTROL assembly (801) (To page 21)
To POWER TRANSFORMER T1 ⑩
To POWER TRANSFORMER T1 ⑫
ST12 S57
ST8 S61
ST4 S65
MEMORY S69
ST11 S58
ST7 S62
ST3 S66
BAND S70
FM MONO S74
ST10 S59
ST6 S63
ST2 S67
F UP S71
CLOCK ADJ S73
ST9 S60
ST5 S64
ST1 S68
F DOWN S72
SET S75
KI1 KI2 KI3 KI4
V51 AAV1070
TUNED STEREO MAIN SUB LOCAL WAKE UP 1 2 TIMER REC
MONO ON SLEEP
DECK II M S
TV FM AM MHz KHz REC TIME
6 7 8 9 10 11 12
A B C D

3.4 SCHEMATIC DIAGRAM FOR DECK CONTROL (AWZ2799) and SUB TRANS assembly


DECK CTRL assembly (AWZ2799)
To SUB TRANS assembly
(53)
(To page 20)
To MECHA UNIT(1) J29
To MECHA UNIT(2) J30
To DECK 1 SW assembly J27
To DECK 2 SW assembly J28
To SIDE assembly CN14
To FRONT assembly J21
To POWER assembly J26
To DECK IND assembly J31
CN29 KPE11
CN30 KPE14
MOTOR A
MOTOR B
+12V
REEL PULSE
GND
Cr02
MODE
SOL-B
SW-COM
SOL-A
HALF
ARF
METAL
ARR
IC801
IC802
X801 ASS1018
TP901 X2 SPEED
TP902 +12V
Q901
Q902
Q911
Q912
Q903
Q904
Q905
Q906
Q907
Q908
Q909
Q910
Q801
J14
4052 A
4052 B
4052 INH
VOL DOWN
VOL UP
PB MUTE
DOLBY R/P
DOLBY
REC MUTE
1 Cr02
x2 SPEED
2 Cr02
PB 1/2
2 BIAS
KPE14 CN21
KI7
KI6
KO6
KO4
KO3
KO1
KO0
SCLK
DATA2
DATA1
FUNC MUTE
MUTE
KPE7 CN26
+5.6V
GND
MOTOR +12V
MOTOR GND
POWER RY
SP RY
RESET

IC801	PDE029-C
IC802	SN74LS42N
Q801	DTC143ES
Q903-906	RN1201
Q901, 902	RN2204
Q907-912	2SA1515
D815-821	RD5.6ESB
D801-814, 901-906	1SS252

Service Manual

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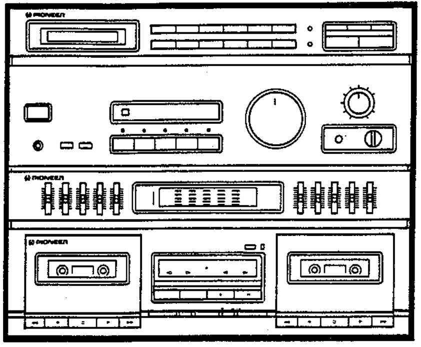
The future of sound and vision.



Neer 3461

ORDER NO.
ARP2027

STEREO DOUBLE CASSETTE DECK RECEIVER

RX-731

RX-731S

- **This manual is applicable to the RX–731/KU and RX–731S/KU types.**
- **As to the RX–731S/KU type, refer to page 60.**

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1. SAFETY INFORMATION ············ 2
2. EXPLODED VIEWS, PACKING AND PARTS LIST ············ 3
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9. SPECIFICATIONS ············ 70

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3464

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YA APR. 1990 Printed in Japan.

This service manual is intended for qualified service technicians; it is not meant for the casual do-it-yourselfer. Qualified technicians have the necessary test equipment and tools, and have been trained to properly and safely repair complex products such as those covered by this manual.
Improperly performed repairs can adversely affect the safety and reliability of the product and may void the warranty. If you are not qualified to perform the repair of this product properly and safely, you should not risk trying to do so and refer the repair to a qualified service technician.

WARNING
Lead in solder used in this product is listed by the California Health and Welfare agency as a known reproductive toxicant which may cause birth defects or other reproductive harm (California Health & Safety Code, Section 25249.5).
When servicing or handling circuit boards and other components which contain lead in in solder, avoid unprotected skin contact with the solder. Also, when soldering do not inhale any smoke or fumes produced.

1. SAFETY INFORMATION

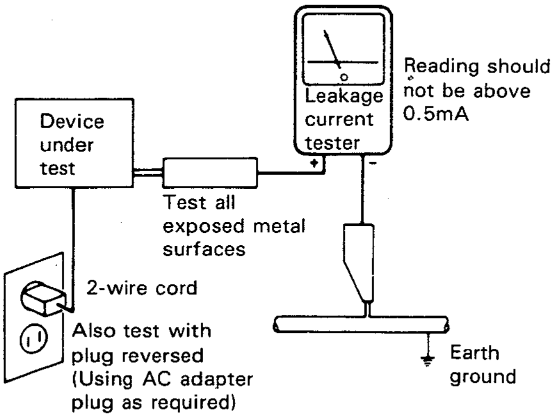
(FOR USA MODEL ONLY)

1. SAFETY PRECAUTIONS

The following check should be performed for the continued protection of the customer and service technician.

LEAKAGE CURRENT CHECK

Measure leakage current to a known earth ground (water pipe, conduit, etc.) by connecting a leakage current tester such as Simpson Model 229-2 or equivalent between the earth ground and all exposed metal parts of the appliance (input/output terminals, screwheads, metal overlays, control shaft, etc.). Plug the AC line cord of the appliance directly into a 120V AC 60Hz outlet and turn the AC power switch on. Any current measured must not exceed 0.5mA.


Device under test
Leakage current tester
Reading should not be above 0.5mA
Test all exposed metal surfaces
2-wire cord
Also test with plug reversed (Using AC adapter plug as required)
Earth ground

AC Leakage Test

ANY MEASUREMENTS NOT WITHIN THE LIMITS OUTLINED ABOVE ARE INDICATIVE OF A POTENTIAL SHOCK HAZARD AND MUST BE CORRECTED BEFORE RETURNING THE APPLIANCE TO THE CUSTOMER.

2. PRODUCT SAFETY NOTICE

Many electrical and mechanical parts in the appliance have special safety related characteristics. These are often not evident from visual inspection nor the protection afforded by them necessarily can be obtained by using replacement components rated for voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in this Service Manual.

Electrical components having such features are identified by marking with a ⚠ on the schematics and on the parts list in this Service Manual.
The use of a substitute replacement component which dose not have the same safety characteristics as the PIONEER recommended replacement one, shown in the parts list in this Service Manual, may create shock, fire, or other hazards.

Product Safety is continuously under review and new instructions are issued from time to time. For the latest information, always consult the current PIONEER Service Manual. A subscription to, or additional copies of, PIONEER Service Manual may be obtained at a nominal charge from PIONEER.

2. EXPLODED VIEWS, PACKING AND PARTS LIST

NOTES:

- *Parts without part number cannot be supplied.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *Parts marked by "◉" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.*

2.1 EXTERIOR AND PACKING

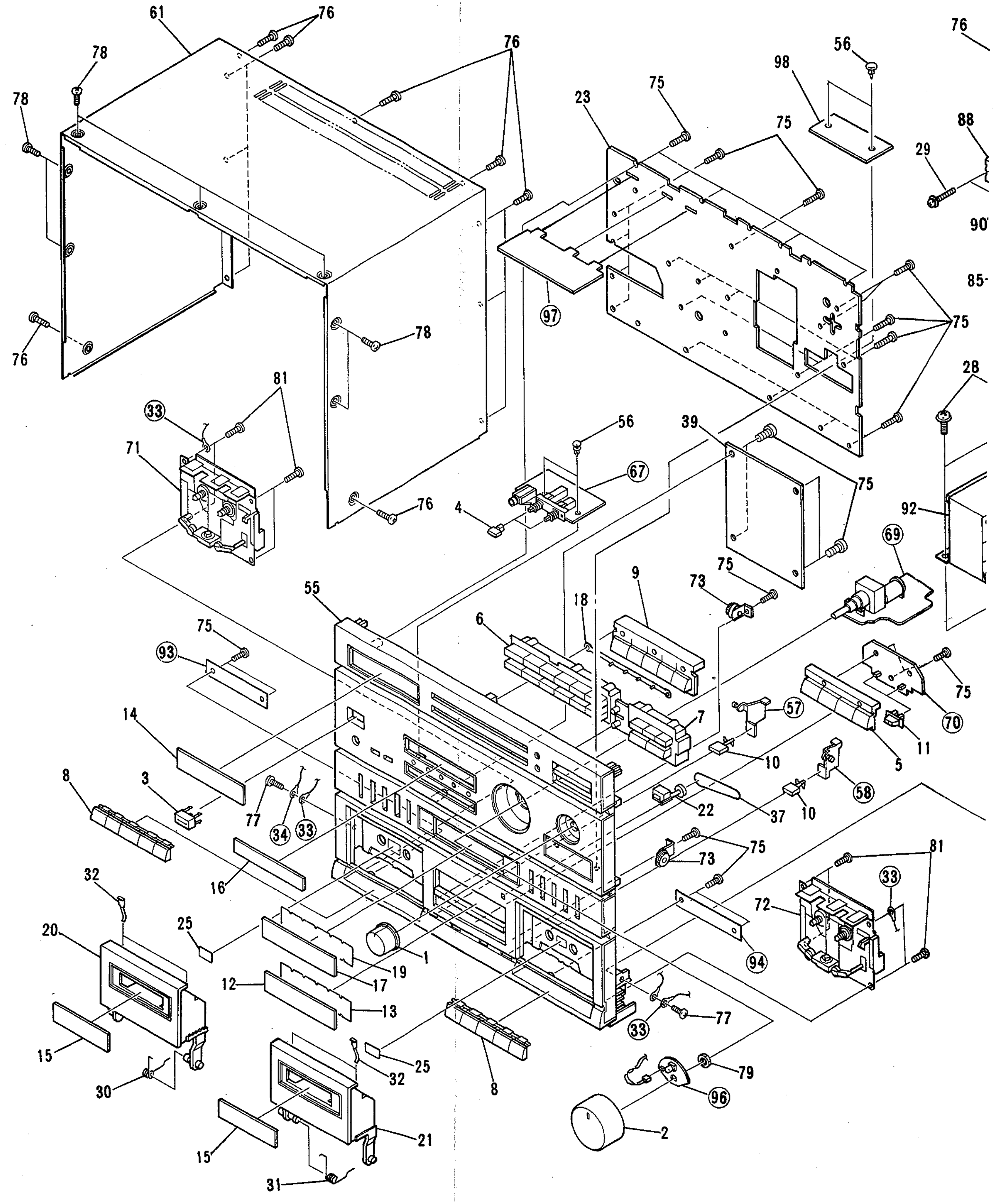
Mark	No.	Description	Parts No.
	1	ROTARY KNOB M (BLANCE)	AAB1098
	2	ROTARY KNOB ASS'Y(PLS)(VOLUME)	AAB1142
	3	POWER KNOB (POWER STAND BY/ON)	AAD1535
	4	KNOB (SPEAKER A/B)	AAD1544
	5	COPY BUTTON (COPY MODE,DECK 2)	AAD1741
	6	STATION BUTTON(STATION CALL)	AAD1742
	7	BAND BUTTON (FM MONO,MEMORY, BAND,+-)	AAD1743
	8	DECK BUTTON (DECK 1,2 OPERATION)	AAD1744
	9	FUNCTION BUTTON (FUNCTION)	AAD1762
	10	EJECT BUTTON(EJECT)	AAD1797
	11	SLIDE KNOB (DOLBY NR,REV MODE)	AAE1103
	12	DECK CENTER PANEL A	AAK1906
	13	DECK CENTER PANEL B	AAK1907
	14	TUNER DISPLAY PANEL	AAK1908
	15	DOOR PANEL	AAK1909
	16	ACRYLIC PANEL	AAK1911
	17	SPEANA PANEL A	AAK1918
	18	INDICATOR LENS (PLS)	AAK1921
	19	SPEANA PANEL B	AAK1937
	20	DOOR L	AAN1191
	21	DOOR R	AAN1192
	22	COUNTER.	AAW1010
	23	FRONT ASSEMBLY	AWZ2793
	24	SIDE ASSEMBLY	AWZ2797
	25	LABEL	AAX1301
	26	POWER ASSEMBLY	AWZ2789
	27	SCREW	ABA−176
	28	SCREW	ABA1021
	29	SCREW	ABA1037
	30	SPRING	ABH1050
	31	SPRING	ABH1051
	32	KEEP PLATE	ABK1011
	33	EARTH LEAD	
	34	EARTH LEAD	
⚠	35	AC POWER CORD	ADG1058

Mark	No.	Description	Parts No.
	36	ANTENNA KIT	AEA1007
	37	COUNTER BELT	AEB1066
	38	SPACER	
	39	DECK CONTROL ASSEMBLY	AWZ2799
	40	FOOT ASSEMBLY	AEC−784
	41	PIN GROMMET	
	42	PC SUPPORT	
	43	PCB SPACER	
	44	MICA SHEET	AEE1014
	45	CORD STOPPER	AEP−113
	46	"AAA" DRY CELL	
	47	FRONT PAD A	AHA1242
	48	REAR PAD A	AHA1243
	49	FRONT PAD B	AHA1244
	50	REAR PAD B	AHA1245
	51	PACKING CASE	AHD1839
	52	BATTERY COVER	AZN1846
	53	SHEET	
⚠	54	AC SOCKET 1−P	AKP1015
	55	FRONT PANEL	AMB1615
	56	RIVET(PLASTIC)	AMR1066
	57	EJECT LEVER (L)	
	58	EJECT LEVER (R)	
	59	CHASSIS	
	60	REAR PANEL	
	61	BONNET CASE	ANE1191
	62	BOTTOM PLATE	
	63	PCB HEAT SINK HOLDER	
	64	HEAT SINK	
	65	OPERATING INSTRUCTIONS	ARB1246
	66	SPEAKER ASSEMBLY	
	67	HEAD PHONE ASSEMBLY	
	68	CONNECT ASSEMBLY	
	69	VR ASSEMBLY	
	70	DECK IND ASSEMBLY	
	71	MECHA UNIT 1	AWY1074
	72	MECHA UNIT 2	AWY1075
	73	DAMPER ASS'Y	AXA1008
	74	REMOTE CONTORL UNIT	AXD1141
	75	SCREW	BBZ26P080FMC
	76	SCREW	BBZ30P080FZK
	77	SCREW	BBZ30P080FMC
	78	SCREW	BPZ30P100FZK
	79	NUT	NK90FUC
	80	BAG	
	81	SCREW	VPZ30P080FMC
⚠	82	FU1 FUSE(6.3A)	AEK−309

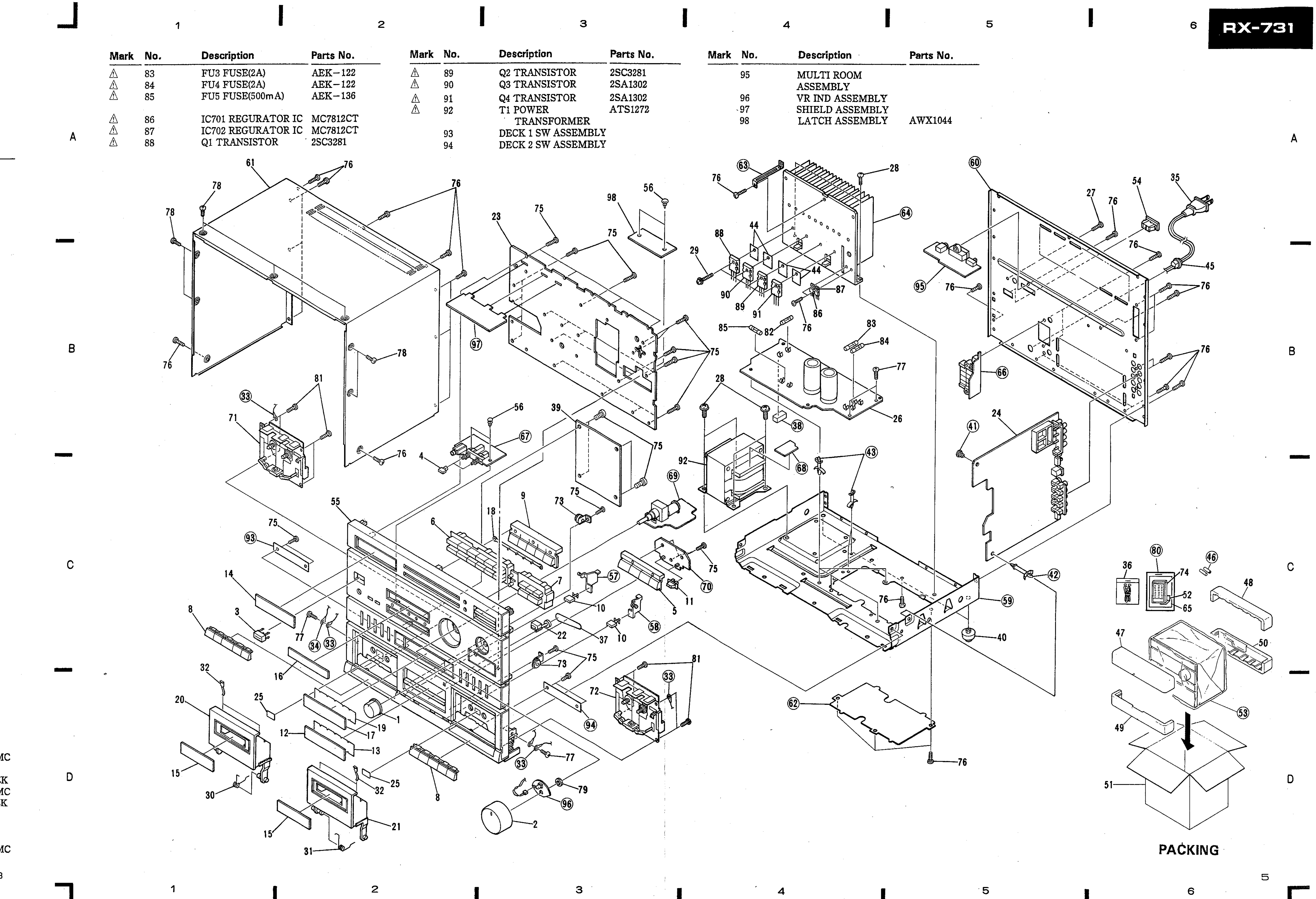
Mark	No.	Description	Parts No.
⚠	83	FU3 FUSE(2A)	AEK−122
⚠	84	FU4 FUSE(2A)	AEK−122
⚠	85	FU5 FUSE(500mA)	AEK−136
⚠	86	IC701 REGURATOR IC	MC7812CT
⚠	87	IC702 REGURATOR IC	MC7812CT
⚠	88	Q1 TRANSISTOR	2SC3281

Mark	No.	Description	Parts No.
⚠	89	Q2 TRANSISTOR	2SC3281
⚠	90	Q3 TRANSISTOR	2SA1302
⚠	91	Q4 TRANSISTOR	2SA1302
⚠	92	T1 POWER TRANSFORMER	ATS1272
	93	DECK 1 SW ASSEMBLY	
	94	DECK 2 SW ASSEMBLY	

Mark



Mark	No.	Description	Parts No.
⚠	83	FU3 FUSE(2A)	AEK−122
⚠	84	FU4 FUSE(2A)	AEK−122
⚠	85	FU5 FUSE(500mA)	AEK−136
⚠	86	IC701 REGURATOR IC	MC7812CT
⚠	87	IC702 REGURATOR IC	MC7812CT
⚠	88	Q1 TRANSISTOR	2SC3281
⚠	89	Q2 TRANSISTOR	2SC3281
⚠	90	Q3 TRANSISTOR	2SA1302
⚠	91	Q4 TRANSISTOR	2SA1302
⚠	92	T1 POWER TRANSFORMER	ATS1272
	93	DECK 1 SW ASSEMBLY	
	94	DECK 2 SW ASSEMBLY	
	95	MULTI ROOM ASSEMBLY	
	96	VR IND ASSEMBLY	
	97	SHIELD ASSEMBLY	
	98	LATCH ASSEMBLY	AWX1044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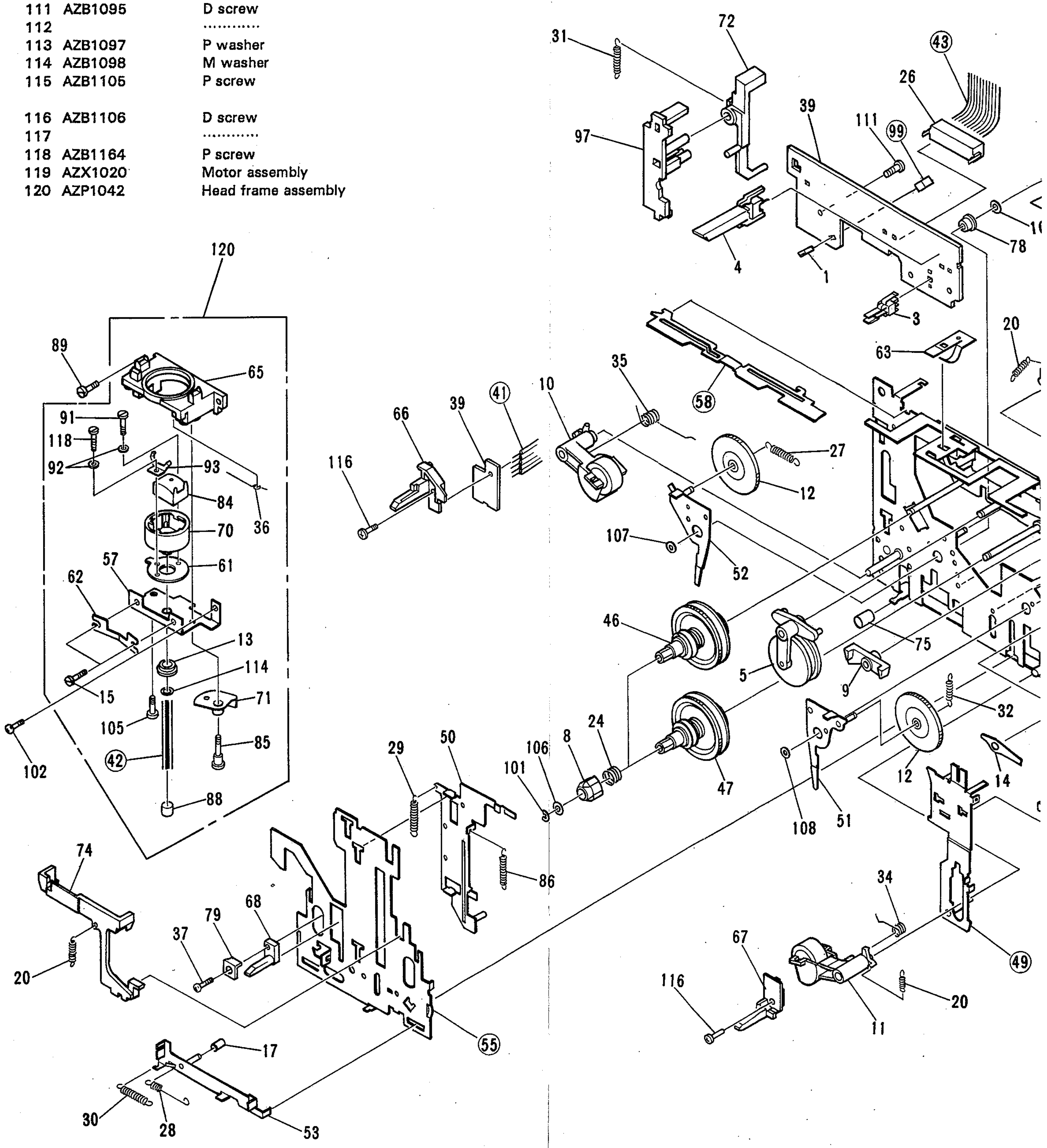
PACKING

2.2 MECHA UNIT 1 (AWY1074)

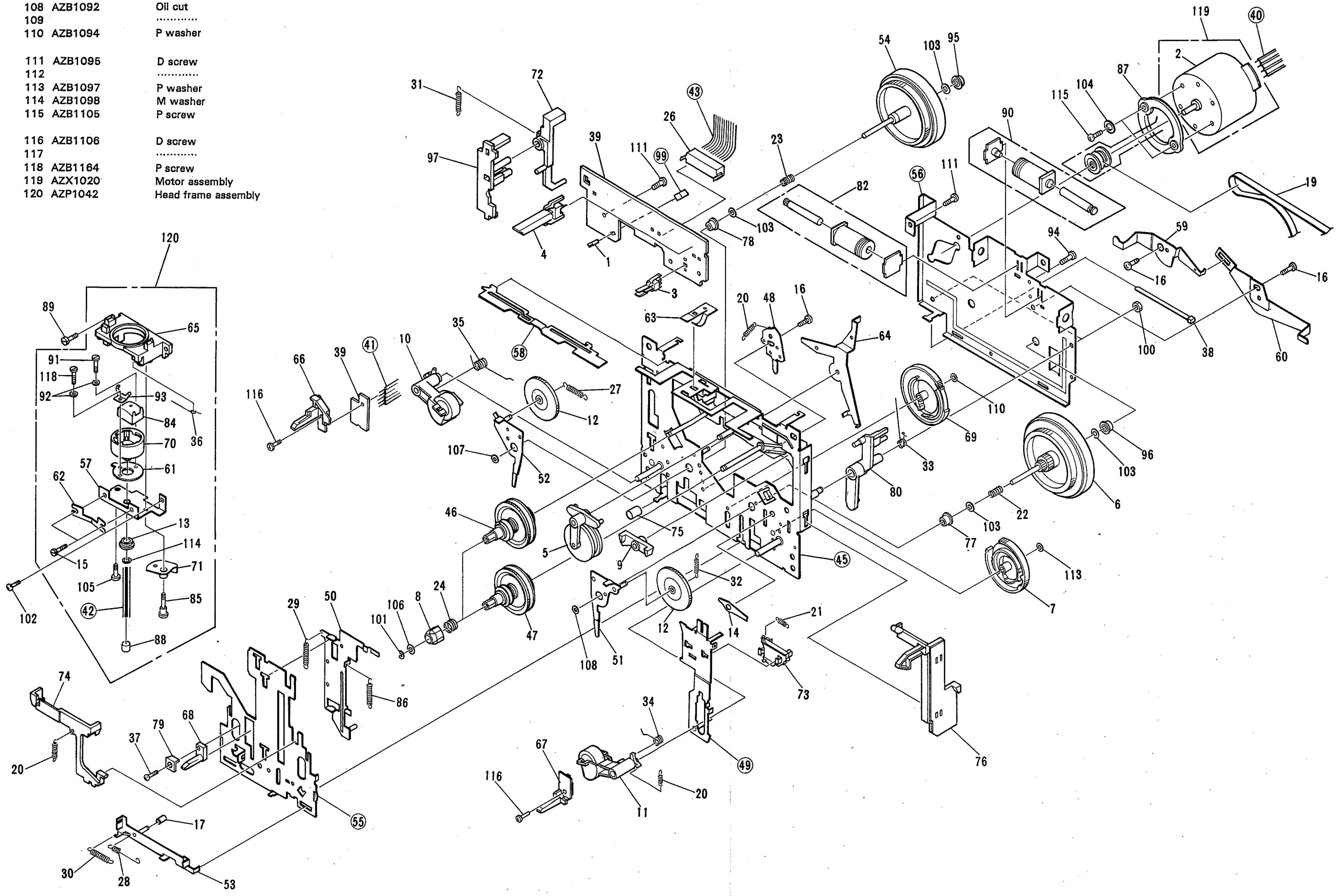
Mark	No.	Parts No.	Description
	1	AZE1018	Hall IC
	2	AZX1019	Motor
	3	AZS1054	Leaf SW (MODE)
	4	AZS1034	Leaf SW
	5	AZN1286	Drive arm assembly
	6	AZN1287	FW assembly A
	7	AZN1288	Cam gear
	8	AZN1289	Reel
	9	AZN1971	FR arm
	10	AZN1972	Pinch roller L assembly
	11	AZN1973	Pinch roller R assembly
	12	AZN1293	Gear
	13	AZN1294	H Gear
	14	AZN1793	CUE arm
	15	AZB1079	Screw
	16	AZB1080	Screw
	17	AZN1984	Collar
	18	AZN1297	Motor pully
	19	AZN1298	Belt
	20	AZN1299	Spring
	21	AZN1300	FR lever spring
	22	AZN1301	FWF spring
	23	AZN1302	FWR spring
	24	AZN1303	Spring
	25		....
	26	AZN1305	Cable holder
	27	AZN1306	Spring
	28	AZN1307	Spring
	29	AZN1308	Spring
	30	AZN1309	Spring
	31	AZN1310	Spring
	32	AZN1311	Spring
	33	AZN1312	Spring
	34	AZN1313	Spring
	35	AZN1314	Spring
	36	AZN1315	Spring
	37	AZB1081	Screw
	38	AZN1316	Nylon band
	39	AZN1995	P.C.board
	40		Jumper wire
	41		Wire assembly
	42		Lead wire
	43		Wire
	44		....
	45		Mecha P.C.board calking assembly
	46	AZN1319	R reel assembly
	47	AZN1320	F reel assembly
	48	AZN1321	Reverse arm calking assembly
	49		FR lever assembly
	50	AZN1975	PLAY lever calking assembly
	51	AZN1976	Gear arm R
	52	AZN1977	Gear arm L
	53	AZN1326	Head lever calking assembly

Mark	No.	Parts No.	Description
	54	AZN1327	FW assembly
	55		Head P.C.board
	56		Plate (FLY WHEEL)
	57	AZN1328	Azimuth plate
	58		SW arm
	59	AZN1988	Eject arm L
	60	AZN1989	Eject arm R
	61	AZN1330	Head arm
	62	AZN1331	Azimuth spring
	63	AZN1332	Cassette stopper
	64	AZN1349	Trigger arm
	65	AZN1334	Head frame
	66	AZN1335	Cassette guide L
	67	AZN1336	Cassette guide R
	68	AZN1337	Cassette guide
	69	AZN1338	Cam gear
	70	AZN1994	Head holder
	71	AZN1340	Head gear
	72	AZN1980	Eject arm 2
	73	AZN1342	Select lever
	74	AZN1343	Brake
	75	AZN1468	Tube
	76	AZN1985	Ratch lever R
	77	AZN1346	Metal
	78	AZN1347	Metal
	79	AZN1348	Cushion
	80	AZN1978	Trigger arm
	81		....
	82	AZS1085	Solenoid
	83		....
	84	AZP1022	P Head
	85	AZB1099	Screw
	86	AZN1352	Spring
	87	AZN1304	Spacer
	88	AZN1470	Tube
	89	AZB1100	Screw
	90	AZS1087	Solenoid
	91	AZB1101	Screw
	92	AZB1102	Spring washer
	93	AZN1471	Head spring
	94	AZB1298	Screw
	95	AZN1833	Capstan holder
	96	AZN1834	Capstan holder
	97	AZN1334	Eject lever L
	98		....
	99		Holder
	100	AZB1084	Nut
	101	AZB1085	E ring
	102	AZB1086	D screw
	103	AZB1121	P washer
	104	AZB1087	N washer
	105	AZB1089	U screw
	106	AZB1090	P washer
	107	AZB1091	Oil cut

Mark	No.	Parts No.	Description
	108	AZB1092	Oil cut
	109		....
	110	AZB1094	P washer
	111	AZB1095	D screw
	112		....
	113	AZB1097	P washer
	114	AZB1098	M washer
	115	AZB1105	P screw
	116	AZB1106	D screw
	117		....
	118	AZB1164	P screw
	119	AZX1020	Motor assembly
	120	AZP1042	Head frame assembly



Mark	No.	Parts No.	Description
	108	AZB1092	Oil cut
	109		…………
	110	AZB1094	P washer
	111	AZB1095	D screw
	112		…………
	113	AZB1097	P washer
	114	AZB1098	M washer
	115	AZB1105	P screw
	116	AZB1106	D screw
	117		…………
	118	AZB1164	P screw
	119	AZX1020	Motor assembly
	120	AZP1042	Head frame assembly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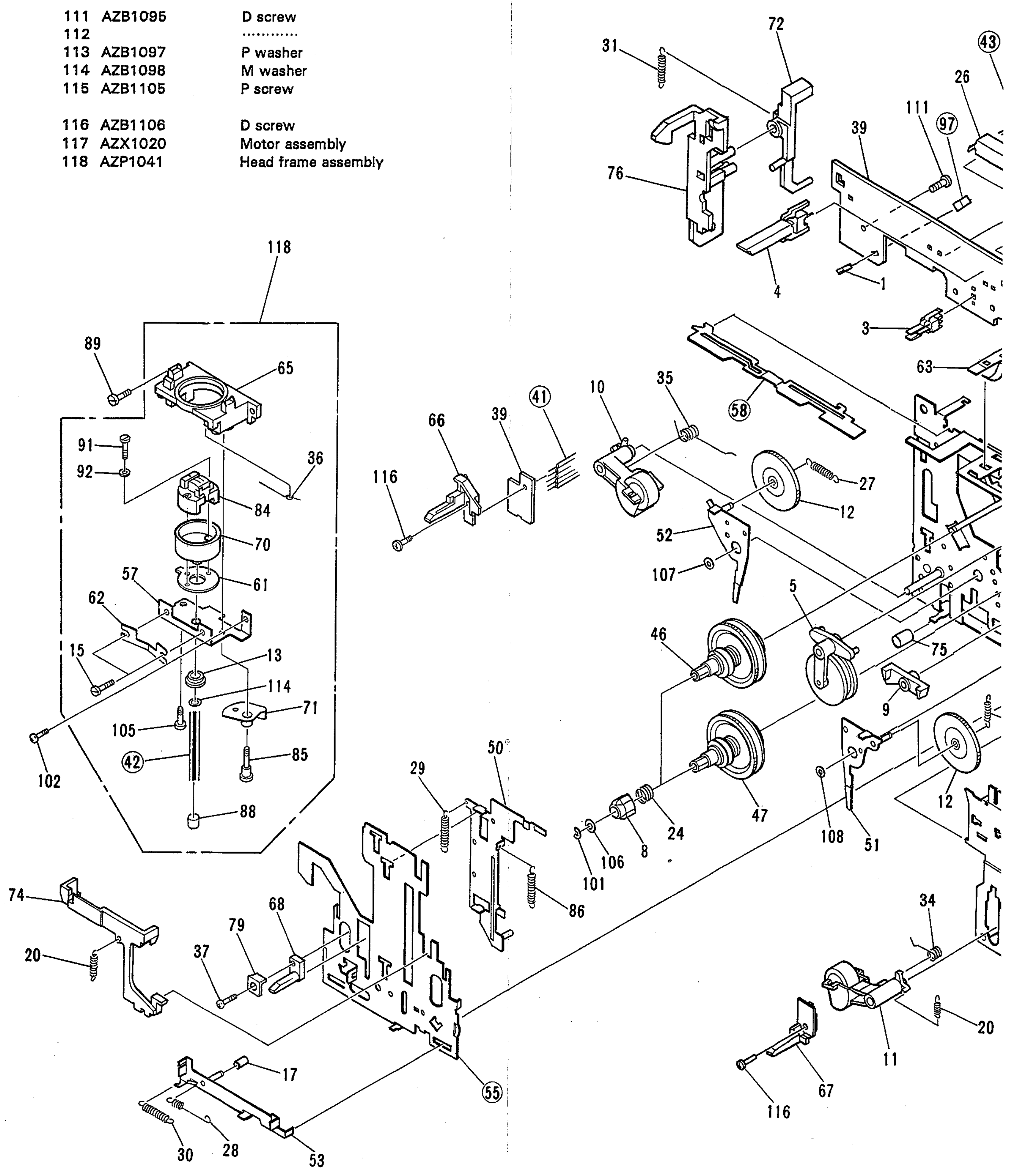
2.3 MECHA UNIT 2 (AWY1075)

Mark	No.	Parts No.	Description
	1	AZE1018	Hall IC
	2	AZX1019	Motor
	3	AZS1054	Leaf SW (MODE)
	4	AZS1034	Leaf SW (ARF, HALF, METAL, CrO2, ARR)
	5	AZN1286	Drive arm assembly
	6	AZN1287	FW assembly A
	7	AZN1288	Cam gear
	8	AZN1289	Reel
	9	AZN1971	FR arm
	10	AZN1972	Pinch roller L assembly
	11	AZN1973	Pinch roller R assembly
	12	AZN1293	Gear
	13	AZN1294	H Gear
	14	AZN1793	CUE arm
	15	AZB1079	Screw
	16	AZB1080	Screw
	17	AZN1984	Collar
	18	AZN1297	Motor pully
	19	AZN1298	Belt
	20	AZN1299	Spring
	21	AZN1300	FR lever spring
	22	AZN1301	FWF spring
	23	AZN1302	FWR spring
	24	AZN1303	Spring
	25		....
	26	AZN1305	Cable holder
	27	AZN1306	Spring
	28	AZN1307	Spring
	29	AZN1308	Spring
	30	AZN1309	Spring
	31	AZN1310	Spring
	32	AZN1311	Spring
	33	AZN1312	Spring
	34	AZN1313	Spring
	35	AZN1314	Spring
	36	AZN1315	Spring
	37	AZB1081	Screw
	38	AZN1316	Nylon band
	39	AZN1997	P.C.board
	40		Jumper wire
	41		Wire assembly
	42		Lead wire
	43		wire
	44		....
	45		Mecha P.C.board calking assembly
	46	AZN1319	R reel assembly
	47	AZN1320	F reel assembly
	48	AZN1321	Reverse arm calking assembly
	49		FR lever calking assembly
	50	AZN1975	PLAY lever calking assembly
	51	AZN1976	Gear arm R calking assembly
	52	AZN1977	Gear arm L calking assembly
	53	AZN1326	Head lever calking assembly
	54	AZN1327	FW assembly
	55		Head P.C.board
	56		Plate (FLY WHEEL)
	57	AZN1328	Azimuth plate
	58		SW arm
	59		....
	60		....
	61	AZN1330	Head arm
	62	AZN1331	Azimuth spring
	63	AZN1332	Cassette stopper
	64	AZN1978	Trigger arm
	65	AZN1334	Head frame
	66	AZN1335	Cassette guide L
	67	AZN1336	Cassette guide R
	68	AZN1337	Cassette guide
	69	AZN1338	Cam gear
	70	AZN1979	Head holder
	71	AZN1340	Head gear
	72	AZN1980	Eject arm 2
	73	AZN1342	Select lever
	74	AZN1343	Brake
	75	AZN1468	Tube
	76	AZN1981	Ratch lever L
	77	AZN1346	Metal
	78	AZN1347	Metal
	79	AZN1348	Cushion
	80	AZN1349	Trigger arm
	81		....
	82	AZS1085	Solenoid
	83		....
	84	AZP1014	R/P Head
	85	AZB1099	Screw
	86	AZN1352	Spring
	87	AZN1304	Spacer
	88	AZN1470	Tube
	89	AZB1100	Screw
	90	AZS1087	Solenoid
	91	AZB1101	Screw
	92	AZB1102	Sprionq washer
	93		....
	94	AZB1298	Screw
	95	AZN1833	Capstan holder
	96	AZN1834	Capstan holder
	97		Holder
	98		....
	99		....
	100	AZB1084	Nut
	101	AZB1085	E ring
	102	AZB1086	D screw
	103	AZB1121	P washer
	104	AZB1087	N washer
	105	AZB1089	U screw
	106	AZB1090	P washer
	107	AZB1091	Oil cut
	108	AZB1092	Oil cut
	109		....
	110	AZB1094	P washer
	111	AZB1095	D screw
	112		....
	113	AZB1097	P washer
	114	AZB1098	M washer
	115	AZB1105	P screw
	116	AZB1106	D screw
	117	AZX1020	Motor assembly
	118	AZP1041	Head frame assembly



Mark	No.	Parts No.	Description
	108	AZB1092	Oil cut
	109		....
	110	AZB1094	P washer
	111	AZB1095	D screw
	112		....
	113	AZB1097	P washer
	114	AZB1098	M washer
	115	AZB1105	P screw
	116	AZB1106	D screw
	117	AZX1020	Motor assembly
	118	AZP1041	Head frame assembly

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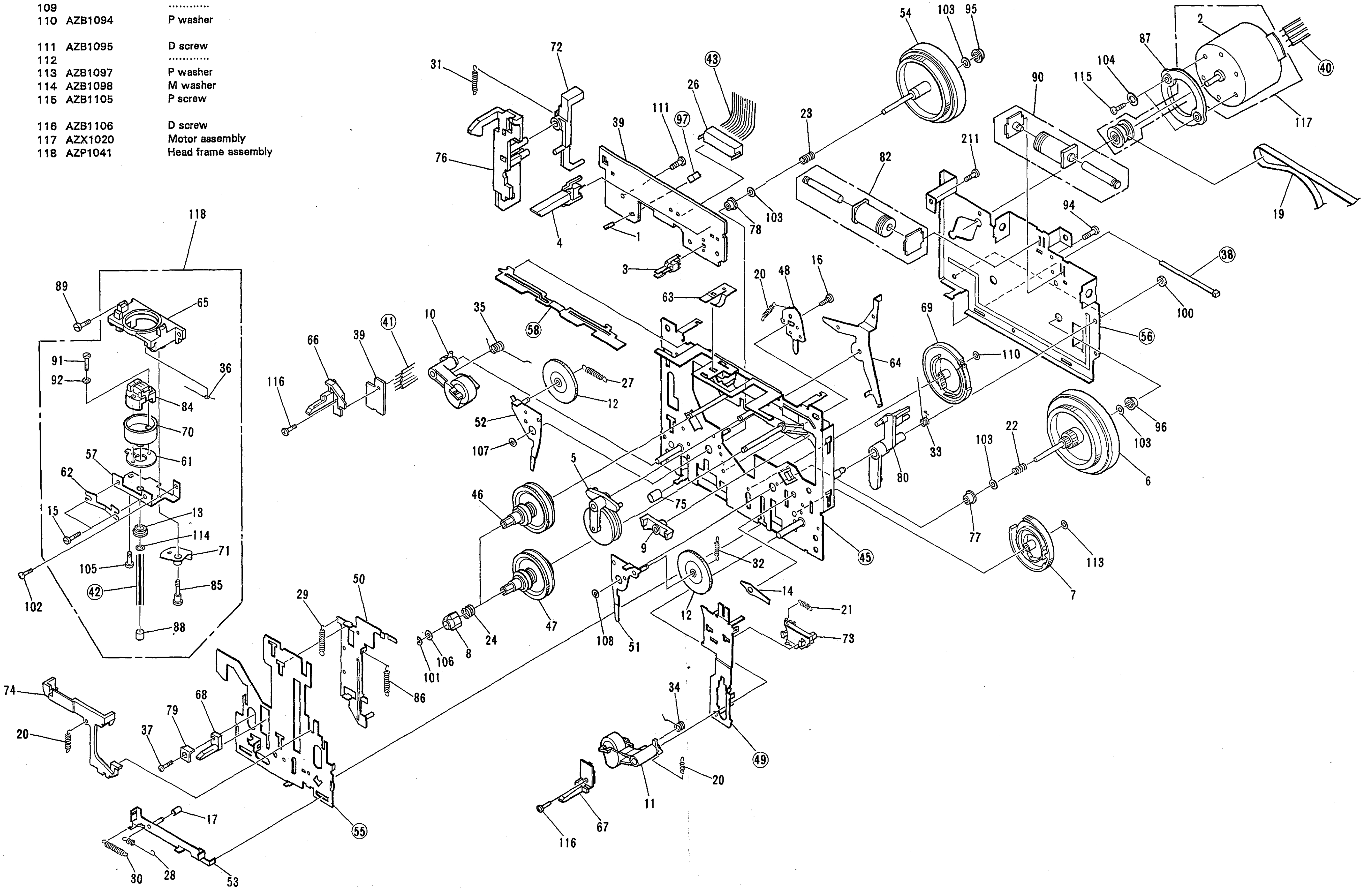
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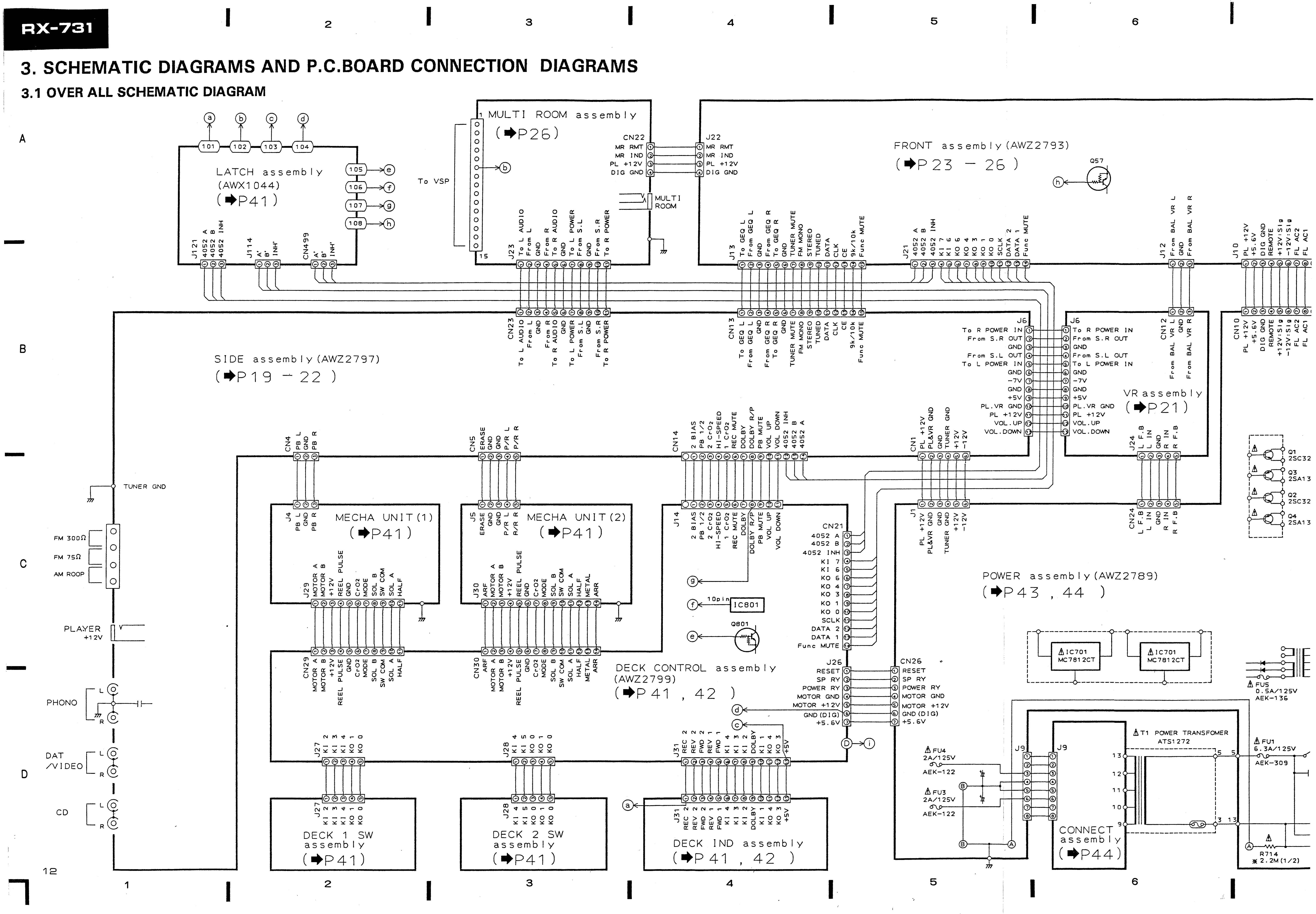
3. SCHEMATIC DIAGRAMS AND P.C.BOARD CONNECTION DIAGRAMS

3.1 OVER ALL SCHEMATIC DIAGRAM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LATCH assembly (AWX1044) (➡P41)
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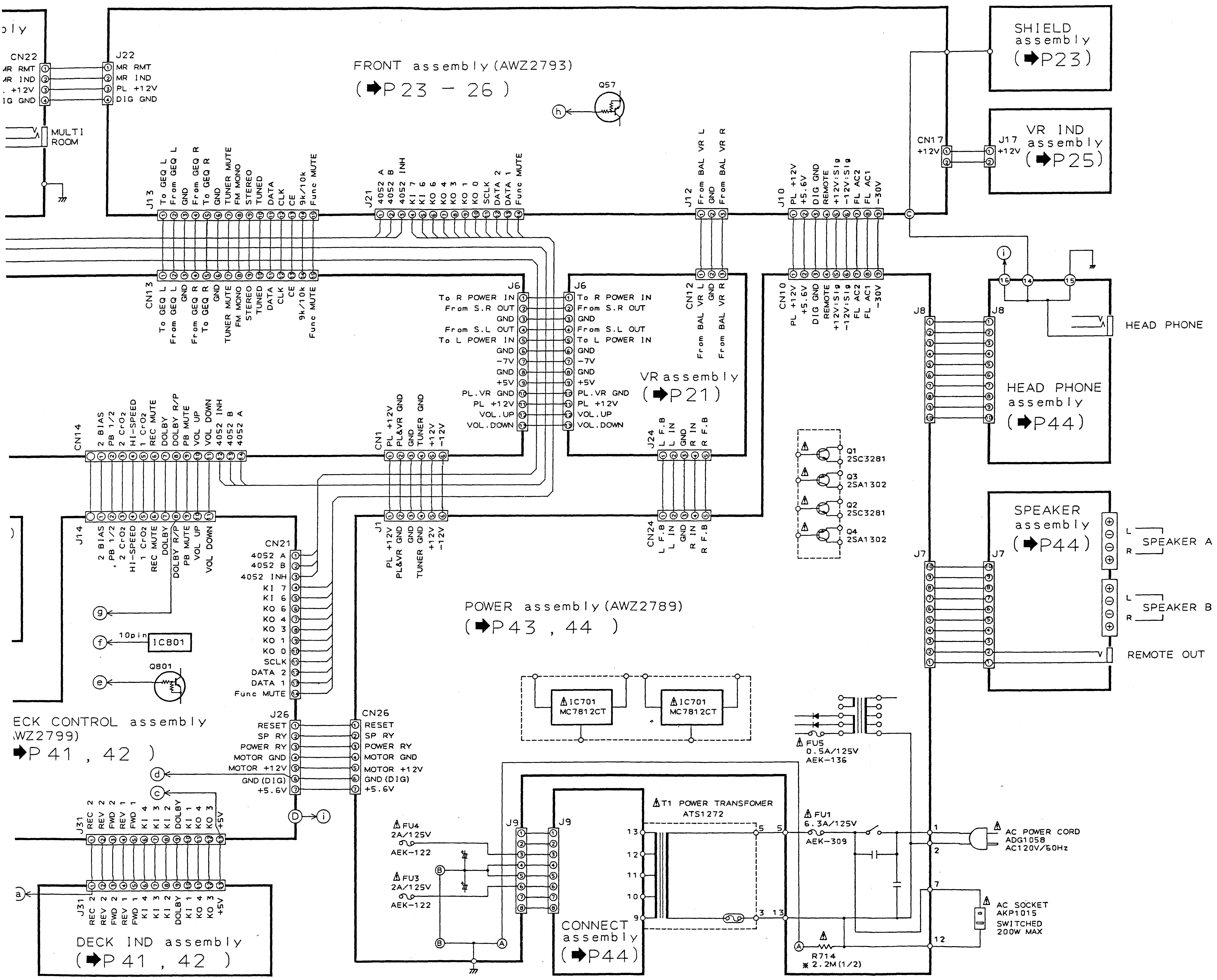
J121 4052 A 4052 B 4052 INH
J114 A' B' INH'
CN499 A' B' INH'
MULTI ROOM assembly (➡P26)
To VSP
CN22 MR RMT MR IND PL +12V DIG GND
J22 MR RMT MR IND PL +12V DIG GND
MULTI ROOM
J23 To L AUDIO From L GND From R To R AUDIO GND To L POWER From S.L GND From S.R To R POWER
FRONT assembly (AWZ2793) (➡P23 − 26)
Q57
J13 To GEQ L From GEQ L GND From GEQ R To GEQ R GND TUNER MUTE FM MONO STEREO TUNED DATA CLK CE 9k/10k Func MUTE
J21 4052 A 4052 B 4052 INH KI 7 KI 6 KO 6 KO 4 KO 3 KO 1 KO 0 SCLK DATA 2 DATA 1 Func MUTE
J12 From BAL VR L GND From BAL VR R
J10 PL +12V +5.6V DIG GND REMOTE +12V:Sig −12V:Sig FL AC2 FL AC1
CN23
CN13
CN12
CN10
SIDE assembly (AWZ2797) (➡P19 − 22)
J6 To R POWER IN From S.R OUT GND From S.L OUT To L POWER IN GND −7V GND +5V PL.VR GND PL +12V VOL.UP VOL.DOWN
VR assembly (➡P21)
TUNER GND
FM 300Ω
FM 75Ω
AM ROOP
PLAYER +12V
PHONO
DAT /VIDEO
CD
L
R
CN4 PB L GND PB R
CN5 ERASE GND GND P/R L P/R R
CN14 2 BIAS PB 1/2 2 CrO2 HI-SPEED 1 CrO2 REC MUTE DOLBY DOLBY R/P PB MUTE VOL UP VOL DOWN 4052 INH 4052 B 4052 A
CN1 PL +12V PL&VR GND GND TUNER GND +12V −12V
J24 L F.B L IN GND R IN R F.B
CN24
Q1 2SC32
Q3 2SA13
Q2 2SC32
Q4 2SA13
J4
MECHA UNIT (1) (➡P41)
J5
MECHA UNIT (2) (➡P41)
J14
J1
CN21 4052 A 4052 B 4052 INH KI 7 KI 6 KO 6 KO 4 KO 3 KO 1 KO 0 SCLK DATA 2 DATA 1 Func MUTE
POWER assembly (AWZ2789) (➡P43 , 44)
J29 MOTOR A MOTOR B +12V REEL PULSE GND CrO2 MODE SOL B SW COM SOL A HALF
J30 ARF MOTOR A MOTOR B +12V REEL PULSE GND CrO2 MODE SOL B SW COM SOL A HALF METAL ARR
CN29
CN30
10pin IC801
Q801
IC701 MC7812CT
DECK CONTROL assembly (AWZ2799) (➡P41 , 42)
J26 RESET SP RY POWER RY MOTOR GND MOTOR +12V GND (DIG) +5.6V
CN26 RESET SP RY POWER RY MOTOR GND MOTOR +12V GND (DIG) +5.6V
FU5 0.5A/125V AEK-136
J27 KI 2 KI 3 KI 4 KO 1 KO 0
J28 KI 4 KI 5 KO 0 KO 1 KO 0
J31 REC 2 REV 2 FWD 2 REV 1 FWD 1 KI 4 KI 3 KI 2 DOLBY KI 1 KO 4 KO 3 +5V
FU4 2A/125V AEK-122
FU3 2A/125V AEK-122
J9
T1 POWER TRANSFOMER ATS1272
FU1 6.3A/125V AEK-309
DECK 1 SW assembly (➡P41)
DECK 2 SW assembly (➡P41)
DECK IND assembly (➡P41 , 42)
CONNECT assembly (➡P44)
R714 2.2M (1/2)

MS



CN22
MR RMT
MR IND
+12V
DIG GND
MULTI ROOM
J22
MR RMT
MR IND
PL +12V
DIG GND
FRONT assembly (AWZ2793)
(➡P23 – 26)
Q57
h
J13
To GEQ L
From GEQ L
GND
From GEQ R
To GEQ R
GND
TUNER MUTE
FM MONO
STEREO
TUNED
DATA
CLK
CE
9k/10k
Func MUTE
J21
4052 A
4052 B
4052 INH
KI 7
KI 6
KO 6
KO 4
KO 3
KO 1
KO 0
SCLK
DATA 2
DATA 1
Func MUTE
J12
From BAL VR L
GND
From BAL VR R
J10
PL +12V
+5.6V
DIG GND
REMOTE
+12V:Sig
-12V:Sig
FL AC2
FL AC1
-30V
CN17
+12V
J17
+12V
SHIELD assembly
(➡P23)
VR IND assembly
(➡P25)
C
CN13
CN12
CN10
J6
To R POWER IN
From S.R OUT
GND
From S.L OUT
To L POWER IN
GND
-7V
GND
+5V
PL.VR GND
PL +12V
VOL.UP
VOL.DOWN
VR assembly
(➡P21)
i
J8
HEAD PHONE
HEAD PHONE assembly
(➡P44)
CN14
J14
2 BIAS
PB 1/2
2 CrO2
HI-SPEED
1 CrO2
REC MUTE
DOLBY
DOLBY R/P
PB MUTE
VOL UP
VOL DOWN
4052 INH
4052 B
4052 A
CN1
J1
PL +12V
PL&VR GND
GND
TUNER GND
+12V
-12V
J24
CN24
L F.B
L IN
GND
R IN
R F.B
Q1 2SC3281
Q3 2SA1302
Q2 2SC3281
Q4 2SA1302
J7
SPEAKER assembly
(➡P44)
SPEAKER A
SPEAKER B
L
R
REMOTE OUT
CN21
4052 A
4052 B
4052 INH
KI 7
KI 6
KO 6
KO 4
KO 3
KO 1
KO 0
SCLK
DATA 2
DATA 1
Func MUTE
g
f
10pin
IC801
e
Q801
POWER assembly (AWZ2789)
(➡P43 , 44)
ECK CONTROL assembly
WZ2799)
➡P41 , 42)
J26
CN26
RESET
SP RY
POWER RY
MOTOR GND
MOTOR +12V
GND (DIG)
+5.6V
d
c
D
IC701 MC7812CT
IC701 MC7812CT
FU5 0.5A/125V AEK-136
J31
REC 2
REV 2
FWD 2
REV 1
FWD 1
KI 4
KI 3
KI 2
DOLBY
KI 1
KO 4
KO 3
+5V
a
DECK IND assembly
(➡P41 , 42)
FU4 2A/125V AEK-122
FU3 2A/125V AEK-122
B
A
J9
CONNECT assembly
(➡P44)
T1 POWER TRANSFOMER ATS1272
13
12
11
10
9
5
3
FU1 6.3A/125V AEK-309
R714 ※2.2M(1/2)
AC POWER CORD ADG1058 AC120V/60Hz
AC SOCKET AKP1015 SWITCHED 200W MAX
1
2
7
12
4
5
6
7
8
9
A
B
C
D

1. RESISTORS:
Indicated in Ω, ¼W, ⅛W, ±5% tolerance unless otherwise noted k : kΩ, M : MΩ, (F) : ±1%, (G) : ±2%, (K) : ±10% (M); ±20% tolerance

2. CAPACITORS:
Indicated in capacity (μF)/voltage (V) unless otherwise noted p : pF
Indication without voltage is 50V except electrolytic capacitor.

3. VOLTAGE, CURRENT:
▭ : Signal voltage at (W + W 8Ω)output (1kHz)
▭ : DC voltage (V) at no input signal
Value in ( ) is DC voltage at rated power.
⇦ mA : DC current at no input signal

4. OTHERS:
➡ : Signal route.
⊘ : Adjusting point.
The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
※ marked capacitors and resistors have parts numbers.

This is the basic schematic diagram, but the actual circuit may vary due to improvements in design.

5. SWITCH

SIDE assembly

S401	BEAT CUT A(105k)/B(102k)

FRONT assembly

S51	CD
S52	VIDEO/AUX
S53	TAPE
S54	PHONO
S55	TUNER
S56	POWER
S57	ST12
S58	ST11
S59	ST10
S60	ST9
S61	ST8
S62	ST7
S63	ST6
S64	ST5
S65	ST4
S66	ST3
S67	ST2
S68	ST1
S69	MEMORY
S70	BAND
S71	F UP
S72	F DOWN
S73	CLOCK ADJ
S74	FM MONO
S75	SET

MULTI ROOM assembly

S76	VSP ON-OFF

DECK IND assembly

S851	PAUSE
S852	REC
S853	HISPEED COPY
S854	NORMAL COPY
S855	DOLBY OFF-ON
S856	RELAY ⇄ / ⊃

DECK 1 SW assembly

S801	1 REV
S802	1 FWD
S803	1 REW
S804	1 FF
S805	1 STOP

DECK 2 SW assembly

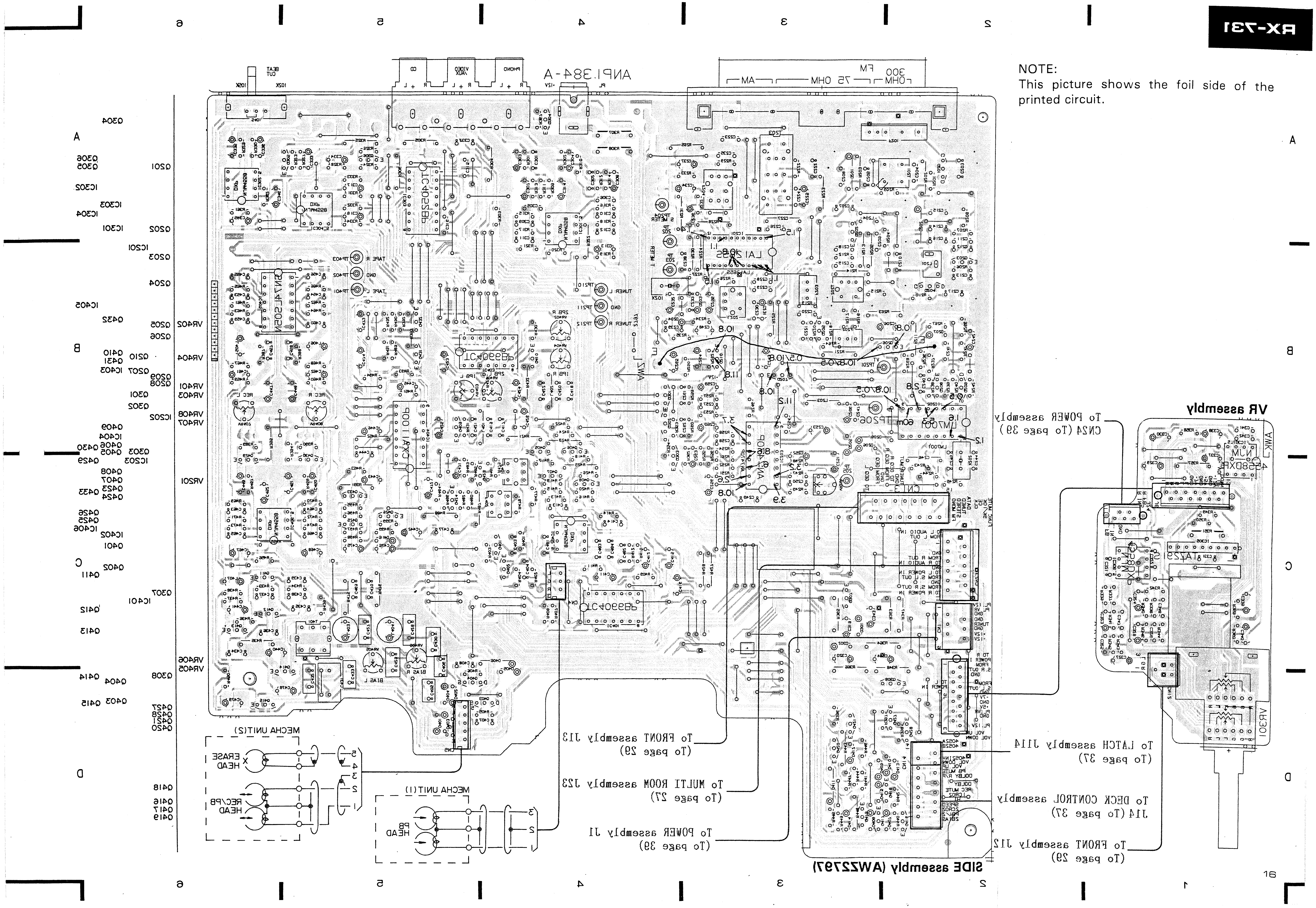
S806	2 REV
S807	2 REW
S808	2 STOP
S809	2 FWD
S810	2 FF

HEAD PHONE assembly

S601	SPEAKER A ON-OFF / B ON-OFF

The underline indicates the switch position.

NOTE:
This picture shows the foil side of the printed circuit.


ANP1384-A
PHONO
VIDEO /AUX
CD
FM 300 OHM
75 OHM
AM
BEAT CUT
VR assembly
VR301
SIDE assembly (AWZ2797)
MECHA UNIT(2)
ERASE HEAD
REC/PB HEAD
MECHA UNIT(1)
PB HEAD
BIAS L
BIAS R
REC L
REC R
TAPE L
TAPE R
TUNER L
TUNER R
GND
To POWER assembly CN24 (To page 39)
To FRONT assembly J13 (To page 29)
To MULTI ROOM assembly J23 (To page 27)
To POWER assembly J1 (To page 39)
To LATCH assembly J114 (To page 37)
To DECK CONTROL assembly J114 (To page 37)
To FRONT assembly J12 (To page 29)
A
B
C
D
6
5
4
3
2
1

3.2 SIDE assembly (AWZ2797) and VR assembly

NOTE

1. This P.C.B connection diagram is viewed from the parts mounted side.
2. The parts which have been mounted on the board can be replaced with those shown with the corresponding wiring symbols listed in the following Table.

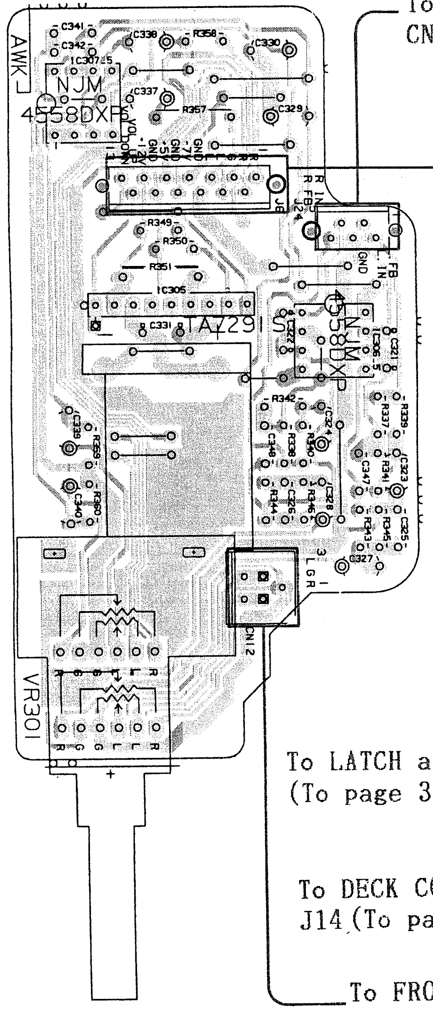
P.C.B. pattern diagram indication	Corresponding part symbol	Part Name
E 0504	E or E	Transistor
0215	or	Radiator type transistor
D203	D203	Diode
R237	R237	Resistor
C513	+	Capacitor (Polarity)
C518		Capacitor (Non-polarity)

Others

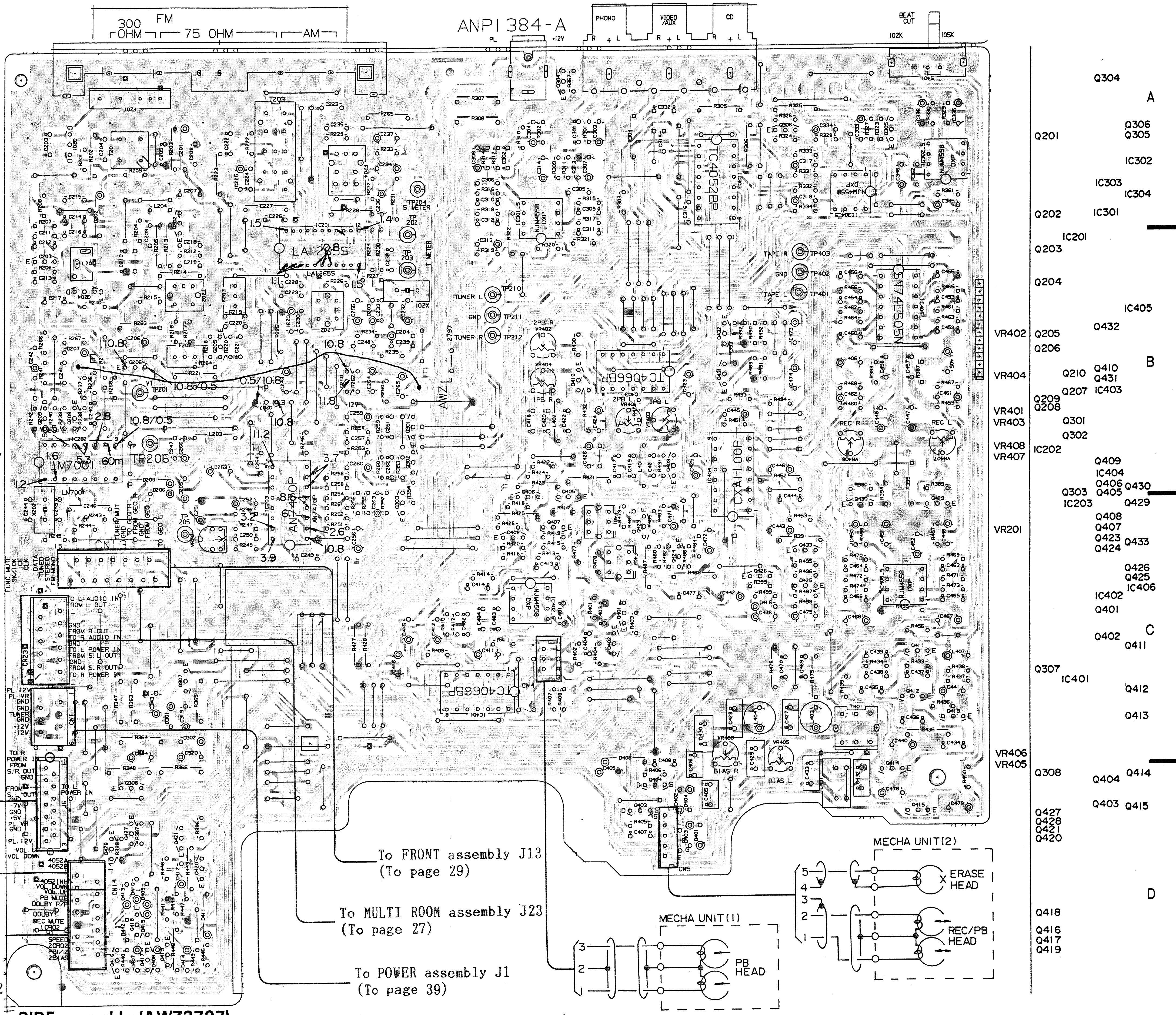
P.C.B. pattern diagram indication	Part Name
IC	IC
S	Switch
RY	Relay
L	Coil
F	Filter
VR	Variable resistor or Semi-fixed resistor

3. The capactor terminal marked with ◎(double circles) shows negatine termianl.
4. The diode terminal marked with ◎(double circles) shows cathode side.
5. The transistor terminal to which E is affixed shows the emitter.

VR assembly


AWK
NJM 4558DXP
TA7291S
NJM 4558DXP
IC305
IC307
C341
C342
C338
R358
C330
C337
R357
C329
R349
R350
R351
C331
CN12
VR301
FB
IN
GND
G
R

To POWER assembly CN24 (To page 39)


300 OHM
FM
75 OHM
AM
ANP1384-A
PL
+12V
PHONO
VIDEO /AUX
CD
R + L
BEAT CUT
102K
105K
LA1285S
LA1265S
LM7001
AN7470P
TC4052BP
TC4066BP
SN74LS05N
CXA1100P
NJM4558 DXP
TP204 S METER
TP203 T METER
TP201
TP206
TP205
TP210 TUNER L
TP211 GND
TP212 TUNER R
TP403 TAPE R
TP402 GND
TP401 TAPE L
2PB R
1PB R
2PB L
1PB L
REC R
REC L
BIAS R
BIAS L
AWZ L
2797
10.8
11.8
11.2
1.5
1.4
1.1
1.2
1.6
2.8
3.7
2.6
3.9
0.5/10.8
10.8/0.5
5.3
60m
FUNC MUTE SK/10K CE CLK DATA TUNED STEREO F/M MONO
CN1
TO L AUDIO IN
FROM L OUT
GND
FROM R OUT
TO R AUDIO IN
GND
TO L POWER IN
FROM S.L OUT
GND
FROM S.R OUT
TO R POWER IN
CN3
PL 12V
PL VR
GND
GND
TUNER
GND
+12V
-12V
TO R POWER IN
FROM S.R OUT
GND
FROM S.L OUT
TO L POWER IN
-7V
GND
+5V
PL VR
GND
PL 12V
VOL UP
VOL DOWN
4052A
4052B
4052INH
VOL DOWN
VOL UP
PB MUTE
DOLBY R/R
REC MUTE
DOLBY
LCR02
SPEED
2CRO2
PBI/2
2BIAS
CN14
CN4
CN5
MECHA UNIT(2)
5
4
3
2
ERASE HEAD
REC/PB HEAD
MECHA UNIT(1)
3
2
1
PB HEAD
Q304
A
Q201
Q306
Q305
IC302
IC303
IC304
Q202
IC301
IC201
Q203
Q204
IC405
VR402
Q205
Q432
Q206
B
VR404
Q210
Q410
Q431
Q207
IC403
Q209
Q208
VR401
VR403
Q301
Q302
VR408
VR407
IC202
Q409
IC404
Q406
Q430
Q303
Q405
IC203
Q429
Q408
VR201
Q407
Q423
Q424
Q433
Q426
Q425
IC406
IC402
Q401
C
Q402
Q411
Q307
IC401
Q412
Q413
VR406
VR405
Q308
Q404
Q414
Q403
Q415
Q427
Q428
Q421
Q420
D
Q418
Q416
Q417
Q419

To LATCH assembly J114 (To page 37)

To DECK CONTROL assembly J14 (To page 37)

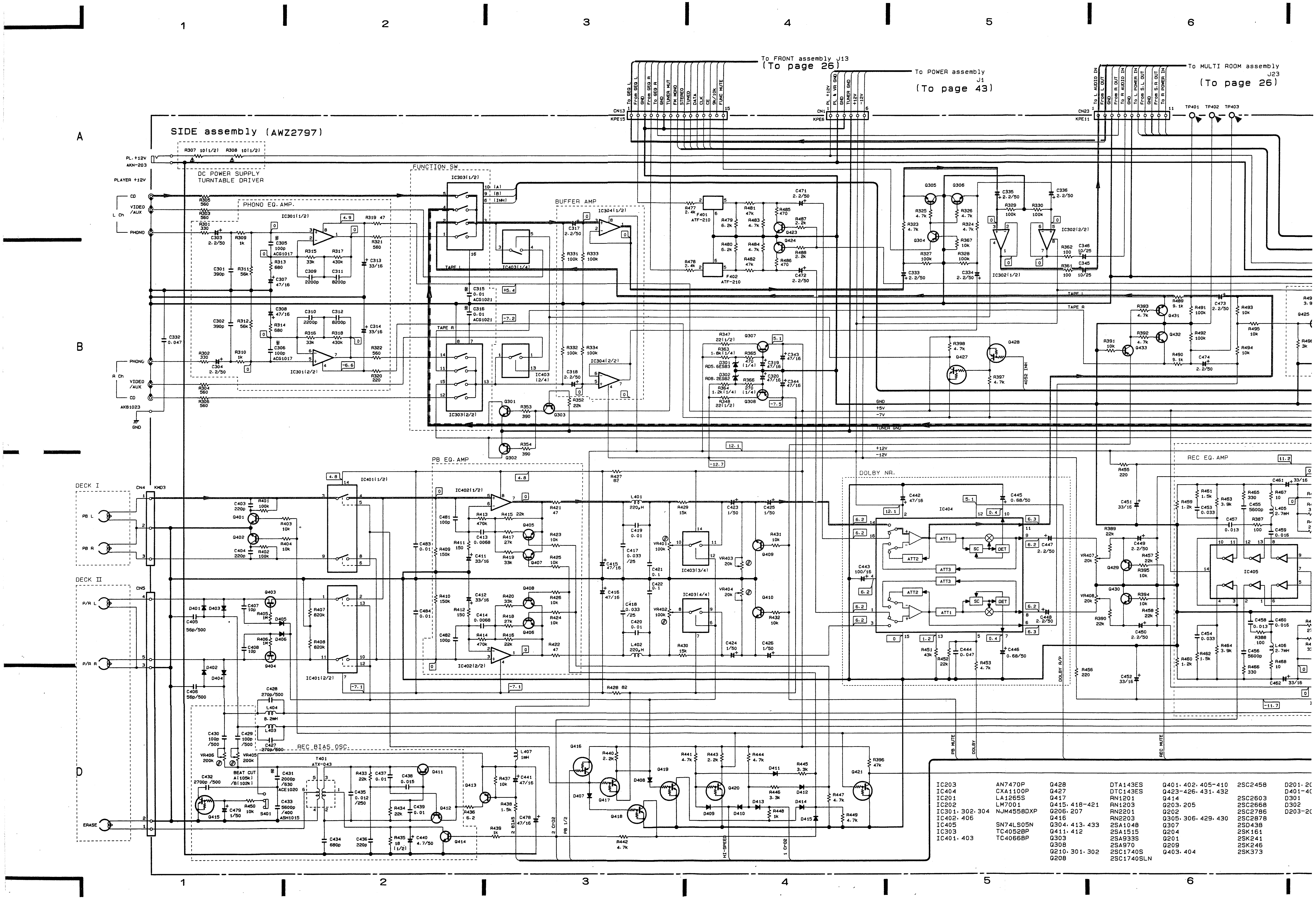
To FRONT assembly J12 (To page 29)

To FRONT assembly J13 (To page 29)

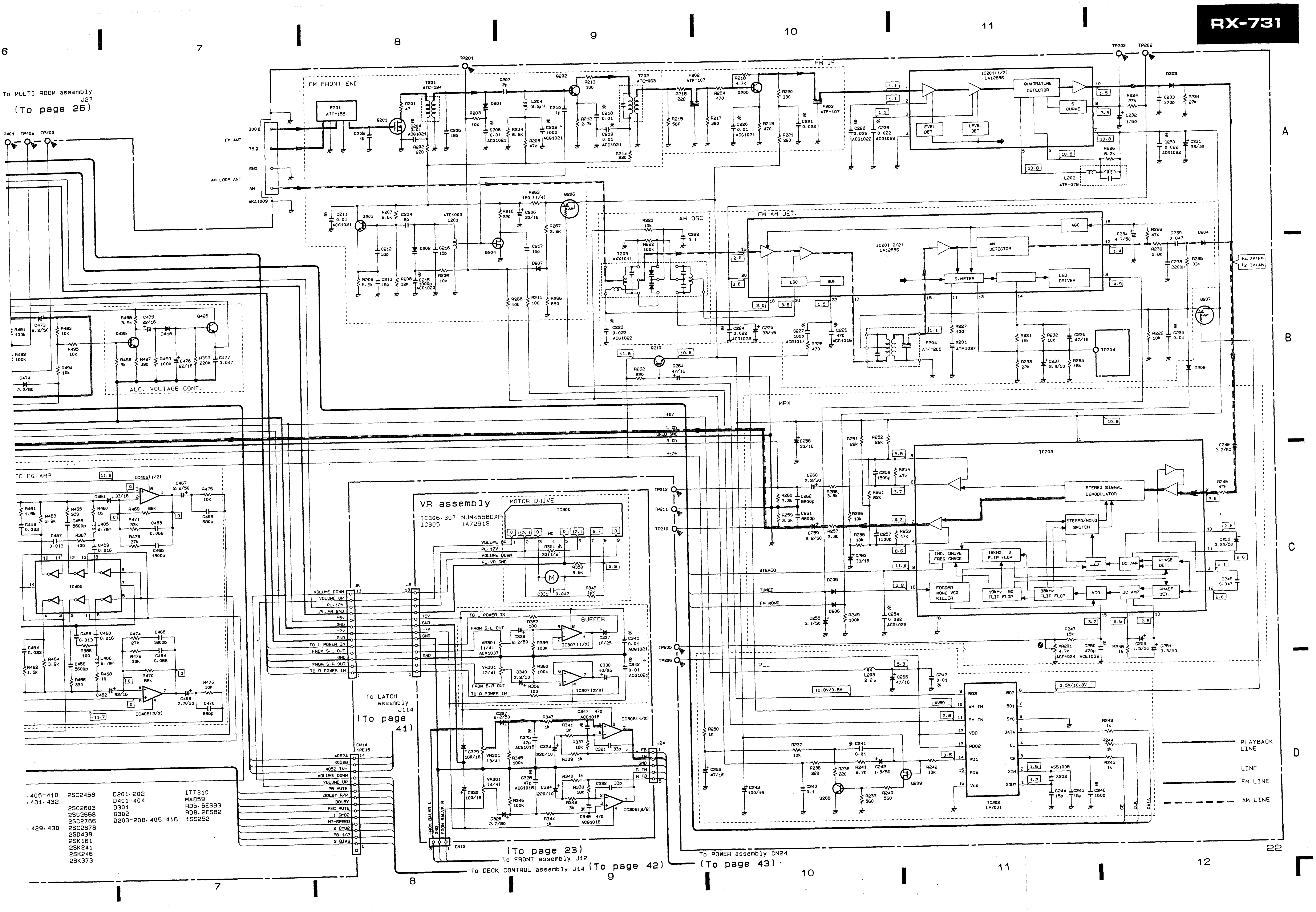
To MULTI ROOM assembly J23 (To page 27)

To POWER assembly J1 (To page 39)

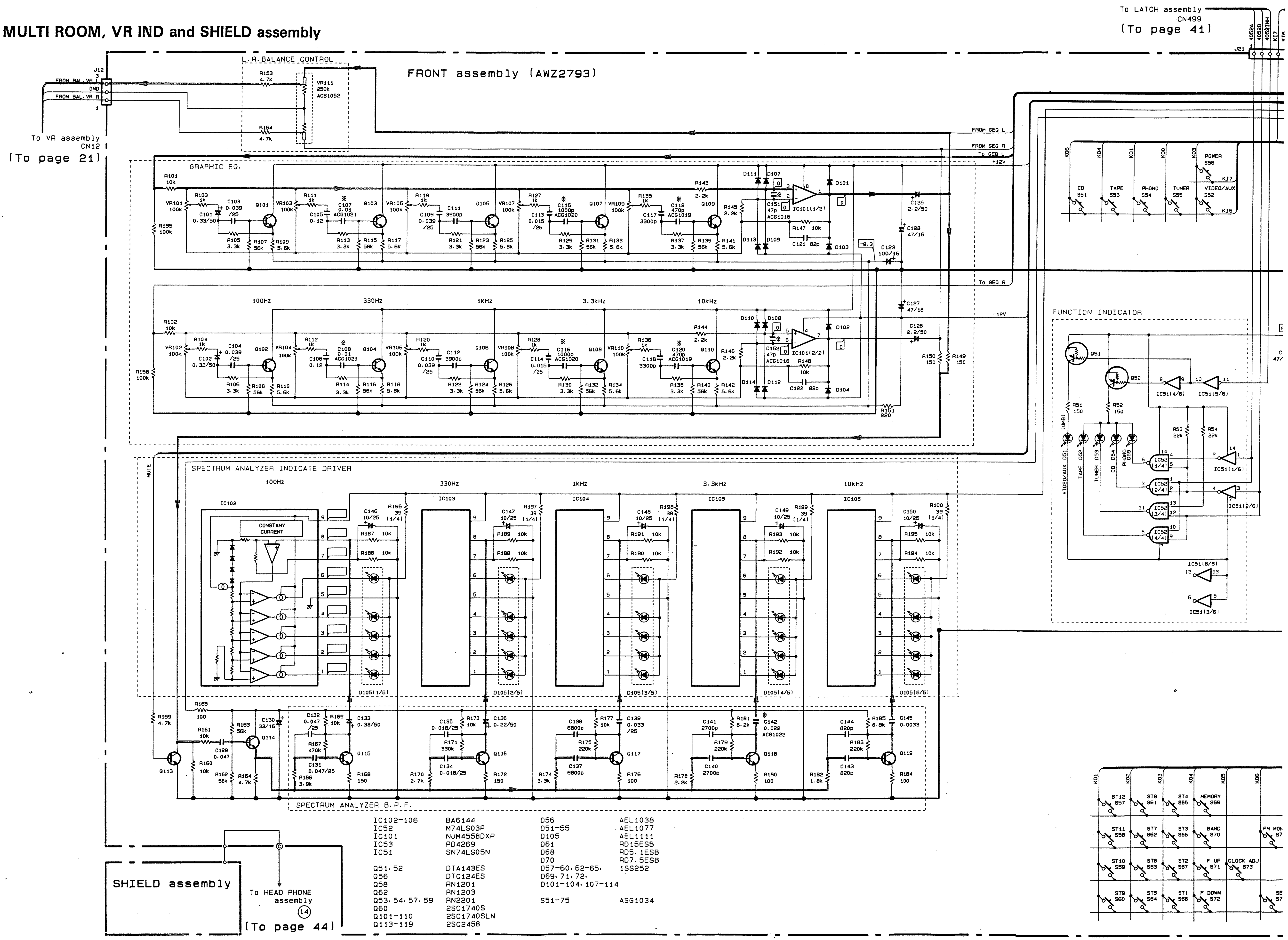
SIDE assembly (AWZ2797)


SIDE assembly (AWZ2797)
To FRONT assembly J13
(To page 26)
To POWER assembly
J1
(To page 43)
To MULTI ROOM assembly
J23
(To page 26)
CN13
KPE15
To GEQ L
From GEQ L
GND
From GEQ R
To GEQ R
GND
TUNER MUT
FM MONO
STEREO
TUNED
DATA
CLK
CE
9k/10k
FUNC MUTE
CN1
KPE6
PL +12V
PL & VR GND
GND
TUNER GND
+12V
-12V
CN23
KPE11
To L AUDIO IN
From L OUT
GND
From R OUT
To R AUDIO IN
GND
To L POWER IN
From S.L OUT
GND
From S.R OUT
To R POWER IN
TP401
TP402
TP403
PL +12V
AKN-203
PLAYER +12V
DC POWER SUPPLY
TURNTABLE DRIVER
R307 10(1/2)
R308 10(1/2)
CD
VIDEO /AUX
L Ch
PHONO
R Ch
AKB1023
GND
PHONO EQ. AMP.
IC301(1/2)
IC301(2/2)
FUNCTION SW
IC303(1/2)
IC303(2/2)
TAPE I
TAPE R
IC403(1/4)
IC403(2/4)
BUFFER AMP
IC304(1/2)
IC304(2/2)
F401
ATF-210
F402
ATF-210
IC302(1/2)
IC302(2/2)
Q301
Q302
Q303
Q304
Q305
Q306
Q307
Q308
Q423
Q424
Q427
Q428
Q431
Q432
Q433
4052 INH
GND
+5V
-7V
TUNER GND
+12V
-12V
DECK I
PB L
PB R
DECK II
P/R L
P/R R
ERASE
CN4
KHD3
CN5
IC401(1/2)
IC401(2/2)
PB EQ. AMP
IC402(1/2)
IC402(2/2)
Q401
Q402
Q403
Q404
Q405
Q406
Q407
Q408
Q409
Q410
L401 220μH
L402 220μH
VR401 100k
VR402 100k
VR403 20k
VR404 20k
IC403(3/4)
IC403(4/4)
DOLBY NR.
IC404
ATT1
ATT2
ATT3
SC
DET
REC EQ. AMP
IC405
VR407 20k
VR408 20k
Q429
Q430
L405 2.7mH
L406 2.7mH
REC BIAS OSC.
T401
ATX-043
L403
L404 8.2mH
L407 1mH
VR405 200k
VR406 200k
BEAT CUT
A(105k)
/B(102k)
S401
Q411
Q412
Q413
Q414
Q415
Q416
Q417
Q418
Q419
Q420
Q421
D401
D402
D403
D404
D405
D406
D407
D408
D409
D410
D411
D412
D413
D414
D415
D301 RD5.6ES3
D302 RD8.2ES2
PB MUTE
DOLBY
REC MUTE
DOLBY R/P
BIAS
CrO2
PB 1/2
HI-SPEED
1 CrO2
1
2
3
4
5
6
A
B
D

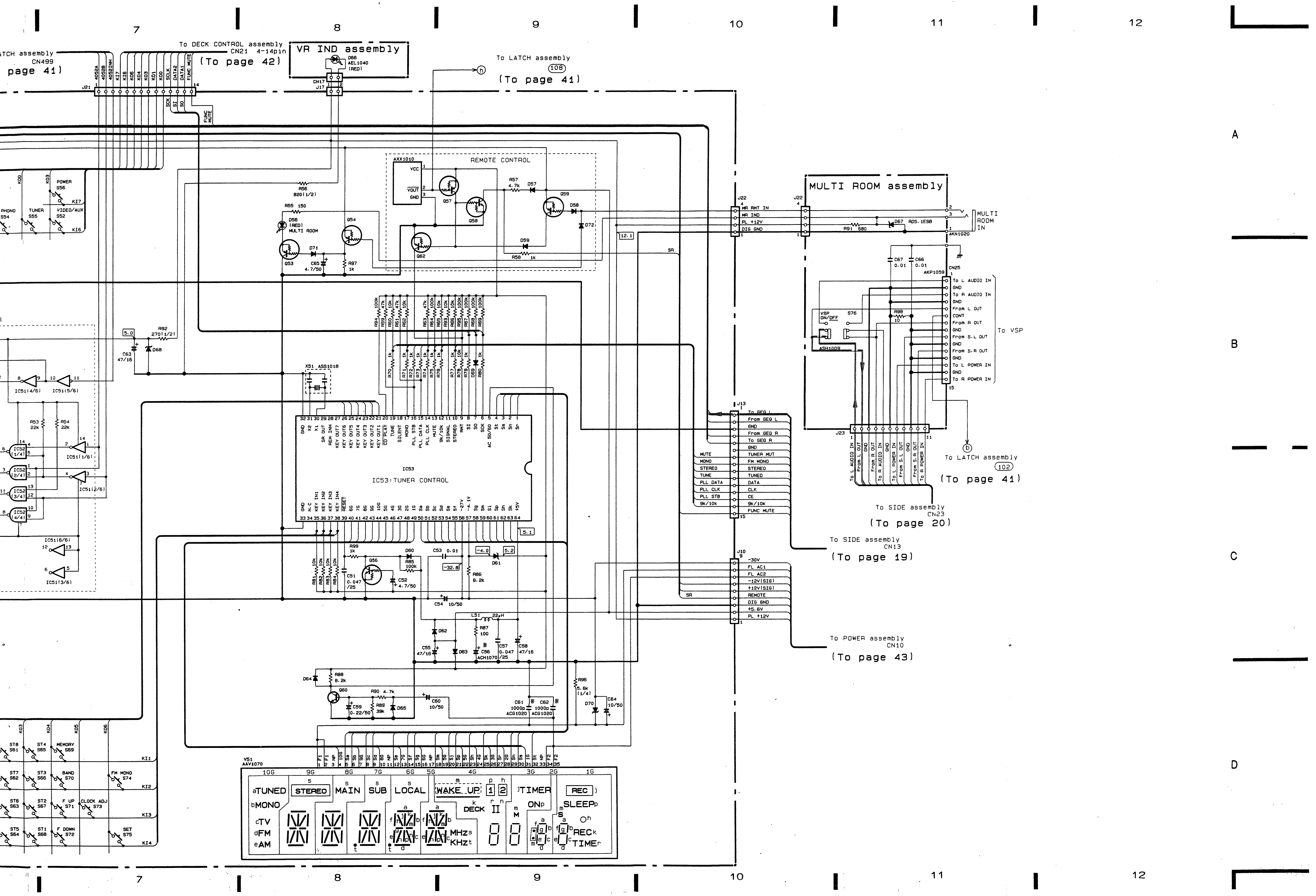
IC203	AN7470P	Q428	DTA143ES	Q401, 402, 405-410	2SC2458	D201, 2(
IC404	CXA1100P	Q427	DTC143ES	Q423-426, 431, 432		D401-4(
IC201	LA1265S	Q417	RN1201	Q414	2SC2603	D301
IC202	LM7001	Q415, 418-421	RN1203	Q203, 205	2SC2668	D302
IC301, 302, 304	NJM4558DXP	Q206, 207	RN2201	Q202	2SC2786	D203-2(
IC402, 406		Q416	RN2203	Q305, 306, 429, 430	2SC2878	
IC405	SN74LS05N	Q304, 413, 433	2SA1048	Q307	2SD438	
IC303	TC4052BP	Q411, 412	2SA1515	Q204	2SK161	
IC401, 403	TC4066BP	Q303	2SA933S	Q201	2SK241	
		Q308	2SA970	Q209	2SK246	
		Q210, 301, 302	2SC1740S	Q403, 404	2SK373	
		Q208	2SC1740SLN			

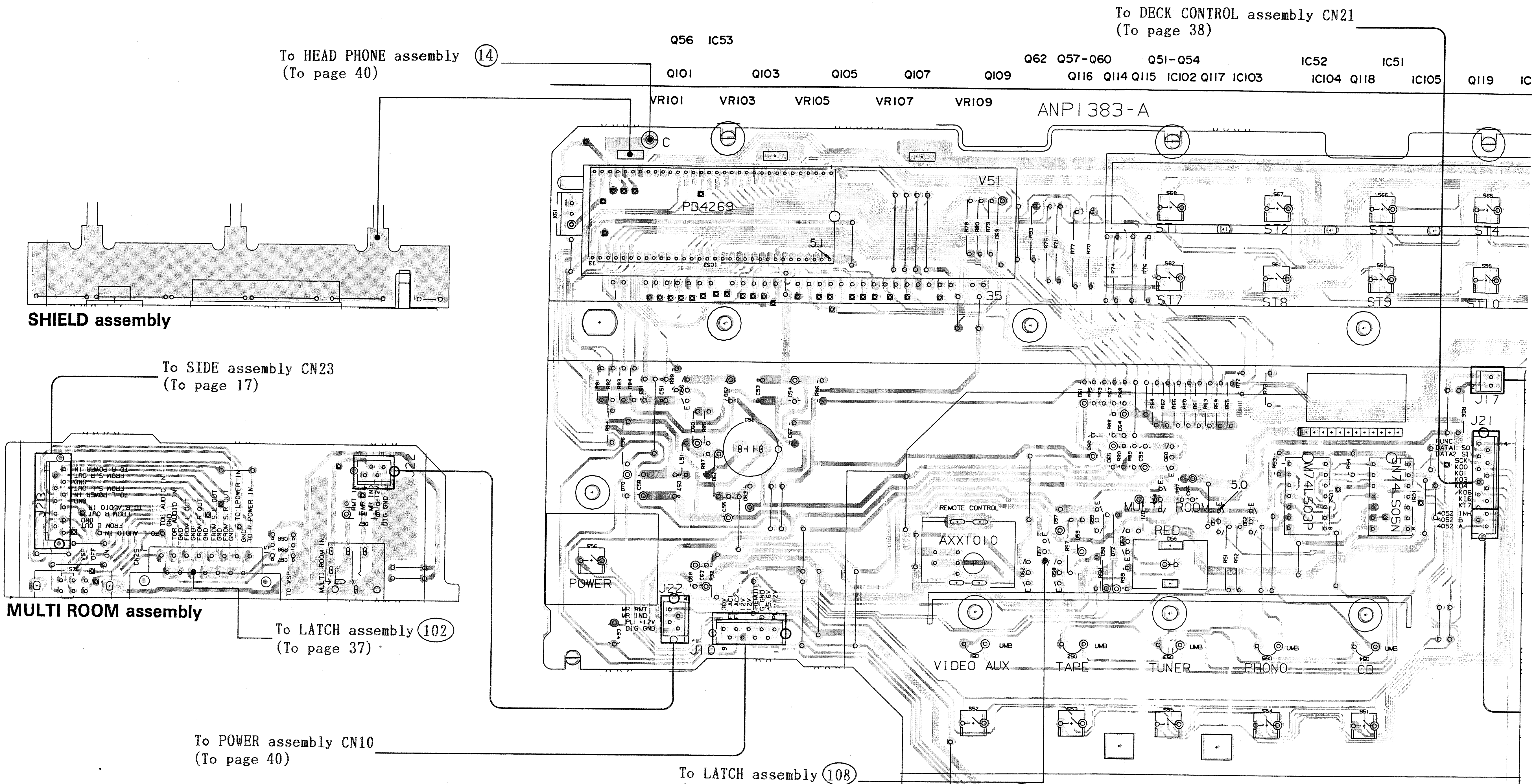

6
7
8
9
10
11
12
A
B
C
D
To MULTI ROOM assembly J23
(To page 26)
TP401
TP402
TP403
TP201
TP202
TP203
FM ANT
300Ω
75Ω
GND
AM LOOP ANT
AM
AKA1009
FM FRONT END
F201 ATF-155
Q201
T201 ATC-194
C207 2p
D201
Q202
L204 2.2μH
R213 100
T202 ATE-063
FM IF
F202 ATF-107
R218 4.7k
Q205
F203 ATF-107
IC201(1/2) LA1265S
QUADRATURE DETECTOR
S CURVE
LEVEL DET
D203
L202 ATE-079
Q203
ATC1003 L201
Q204
R263 150 (1/4)
Q206
AM OSC
T203 AXX1011
FM AM DET.
IC201(2/2) LA1265S
AGC
AM DETECTOR
S.METER
LED DRIVER
OSC
BUF
F204 ATF-208
X201 ATF1027
TP204
Q207
D204
D208
+4.7V:FM
+2.3V:AM
Q210
R262 820
C264 47/16
Q425
Q426
D416
ALC. VOLTAGE CONT.
MPX
+5V
L Ch
TUNED GND
R Ch
+12V
IC203
STEREO SIGNAL DEMODULATOR
STEREO/MONO SWITCH
IND. DRIVE FREQ CHECK
19kHz 0 FLIP FLOP
DC AMP
PHASE DET.
FORCED MONO VCO KILLER
19kHz 90 FLIP FLOP
38kHz FLIP FLOP
VCO
STEREO
TUNED
FM MONO
D205
D206
TP212
TP211
TP210
TP205
TP206
VR201 4.7k ACP1024
PLL
L203 2.2μ
10.8V/0.5V
0.5V/10.8V
IC202 LM7001
BO3
AM IN
FM IN
VDD
PDO2
PD1
PD2
Vss
BO2
BO1
SYC
DATA
CL
CE
XIN
XOUT
X202 ASS1005
Q208
Q209
CE
CLK
DATA
PLAYBACK LINE
LINE
FM LINE
AM LINE
EC EQ. AMP
IC406(1/2)
IC406(2/2)
IC405
VR assembly
IC306, 307 NJM4558DXP
IC305 TA7291S
MOTOR DRIVE
IC305
VOLUME UP
PL. 12V
VOLUME DOWN
PL. VR GND
R351 33(1/2)
R350 3.6k
R349 12k
C331 0.047
M
J6
VOLUME DOWN
VOLUME UP
PL. 12V
PL. VR GND
+5V
GND
-7V
GND
TO L POWER IN
FROM S.L OUT
GND
FROM S.R OUT
TO R POWER IN
BUFFER
VR301 (1/4) ACX1037
VR301 (2/4)
VR301 (3/4)
VR301 (4/4)
IC307(1/2)
IC307(2/2)
IC306(1/2)
IC306(2/2)
To LATCH assembly J114
(To page 41)
CN14 KPE15
4052A
4052B
4052 INH
VOLUME DOWN
VOLUME UP
PB MUTE
DOLBY R/P
REC MUTE
DOLBY
1 CrO2
HI-SPEED
2 CrO2
PB 1/2
2 BIAS
J24
L FB
L IN
GND
R IN
R FB
FROM BALVR L
GND
FROM BALVR R
CN12
(To page 23)
To FRONT assembly J12
To DECK CONTROL assembly J14 (To page 42)
To POWER assembly CN24
(To page 43)
. 405-410 2SC2458
. 431. 432
2SC2603
2SC2668
2SC2786
. 429. 430 2SC2878
2SD438
2SK161
2SK241
2SK246
2SK373
D201. 202
D401-404
D301
D302
D203-208. 405-416
ITT310
MA859
RD5. 6ESB3
RD8. 2ESB2
1SS252

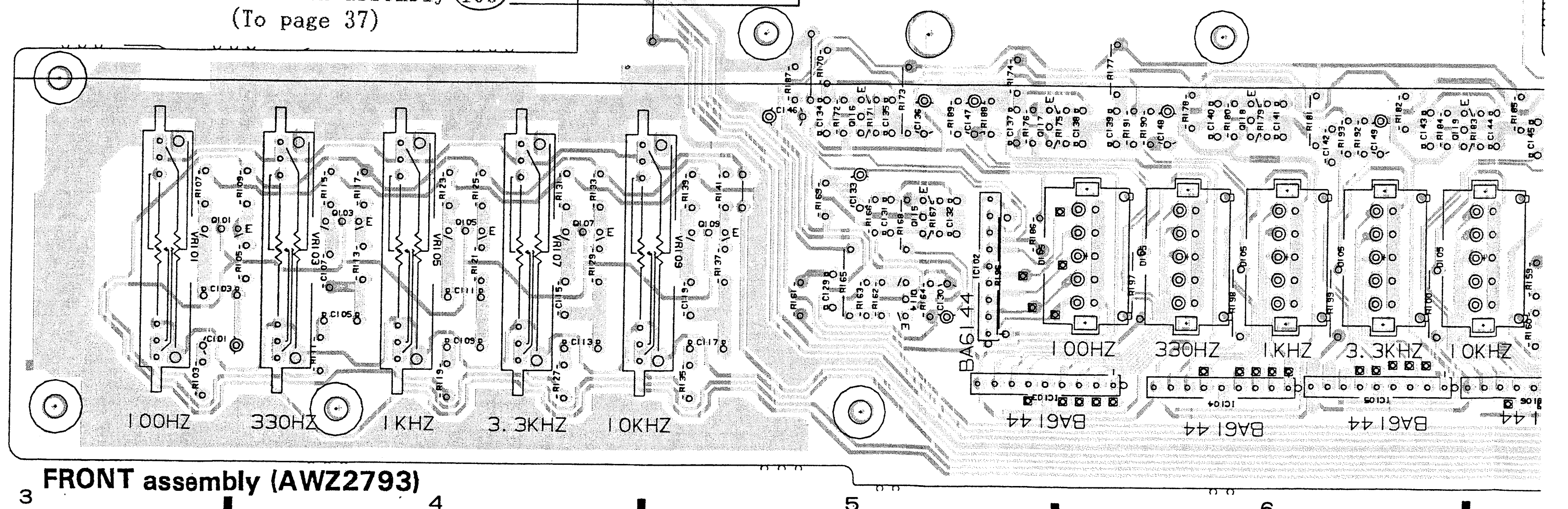
3.3 FRONT (AWZ2793), MULTI ROOM, VR IND and SHIELD assembly


L.R. BALANCE CONTROL
FRONT assembly (AWZ2793)
To VR assembly CN12 (To page 21)
To LATCH assembly CN499 (To page 41)
FROM BAL. VR L
GND
FROM BAL. VR R
VR111 250k ACS1052
FROM GEQ L
FROM GEQ R
To GEQ L
To GEQ R
+12V
-12V
GRAPHIC EQ.
100Hz
330Hz
1kHz
3.3kHz
10kHz
IC101(1/2)
IC101(2/2)
SPECTRUM ANALYZER INDICATE DRIVER
MUTE
IC102
CONSTANT CURRENT
IC103
IC104
IC105
IC106
D105(1/5)
D105(2/5)
D105(3/5)
D105(4/5)
D105(5/5)
SPECTRUM ANALYZER B.P.F.
FUNCTION INDICATOR
Q51
Q52
IC51(1/6)
IC51(2/6)
IC51(3/6)
IC51(4/6)
IC51(5/6)
IC51(6/6)
IC52(1/4)
IC52(2/4)
IC52(3/4)
IC52(4/4)
VIDEO/AUX D51
TAPE D52
TUNER D53
CD D54
PHONO D55
CD S51
TAPE S53
PHONO S54
TUNER S55
VIDEO/AUX S52
POWER S56
ST12 S57
ST11 S58
ST10 S59
ST9 S60
ST8 S61
ST7 S62
ST6 S63
ST5 S64
ST4 S65
ST3 S66
ST2 S67
ST1 S68
MEMORY S69
BAND S70
F UP S71
F DOWN S72
CLOCK ADJ S73
SHIELD assembly
To HEAD PHONE assembly ⑭ (To page 44)

IC102-106	BA6144	D56	AEL1038
IC52	M74LS03P	D51-55	AEL1077
IC101	NJM4558DXP	D105	AEL1111
IC53	PD4269	D61	RD15ESB
IC51	SN74LS05N	D68	RD5.1ESB
		D70	RD7.5ESB
Q51, 52	DTA143ES	D57-60, 62-65, D69, 71, 72, D101-104, 107-114	1SS252
Q56	DTC124ES		
Q58	RN1201		
Q62	RN1203		
Q53, 54, 57, 59	RN2201	S51-75	ASG1034
Q60	2SC1740S		
Q101-110	2SC1740SLN		
Q113-119	2SC2458		

7
8
9
10
11
12
A
B
C
D
LATCH assembly CN499 (To page 41)
To DECK CONTROL assembly CN21 4-14pin (To page 42)
J21
4052A
4052B
4052INH
KI7
KI6
KO5
KO4
KO3
KO1
KO0
SCLK
DATA2
DATA1
FUNC MUTE
SCK
SI
SO
FUNC MUTE
VR IND assembly
D66 AEL1040 (RED)
CN17
J17
To LATCH assembly (108) (To page 41)
REMOTE CONTROL
AXX1010
VCC
VOUT
GND
Q57
Q58
Q59
Q62
R57 4.7k
D57
D58
D59
R58 1k
D72
R56 820(1/2)
R55 150
D56 (RED) MULTI ROOM
Q53
Q54
D71
C65 4.7/50
R97 1k
POWER S56
PHONO S54
TUNER S55
VIDEO/AUX S52
KI7
KI6
KO0
KO3
5.0
R92 270(1/2)
C63 47/16
D68
IC51(4/6)
IC51(5/6)
R53 22k
R54 22k
IC52 (1/4)
IC52 (2/4)
IC52 (3/4)
IC52 (4/4)
IC51(1/6)
IC51(2/6)
IC51(6/6)
IC51(3/6)
X51 ASS1018
R94 100k
R59 47k
R60 47k
R61 10k
R62 47k
R63 47k
R64 100k
R65 10k
R93 10k
R66 10k
R95 100k
R67 100k
R68 100k
R69 100k
R70 1k
R71 1k
R72 1k
R73 1k
R74 1k
R75 1k
R76 1k
R77 1k
R78 1k
R79 1k
D69
R80 1k
IC53
IC53: TUNER CONTROL
GND
X2
X1
SR OUT
REM IN
KEY OUT7
KEY OUT6
KEY OUT5
KEY OUT4
KEY OUT3
KEY OUT2
KEY OUT1
CD PLAY
TUNE
SILENT
MONO
PLL STB
PLL DATA
PLL CLK
MUTE
9K/10K
SIGNAL
STEREO
RMT
SI
SO
SCK
AC 50/60
St
Su
Sn
Sh
N.C
KEY IN1
KEY IN2
KEY IN3
KEY IN4
RESET
-27V
-4.1V
+5V
5.1
R81 10k
R82 10k
R83 10k
R84 10k
R99 1k
Q56
D60
R85 100k
C51 0.047/25
C52 4.7/50
C53 0.01
-4.0
5.2
D61
-32.8
R86 8.2k
C54 10/50
L51 22μH
D62
R87 100
C55 47/16
D63
C56 ACH1070
C57 0.047/25
C58 47/16
D64
R88 8.2k
Q60
R90 4.7k
C59 0.22/50
R89 39k
D65
C60 10/50
R96 5.6k (1/4)
C61 1000p ACG1020
C62 1000p ACG1020
D70
C64 10/50
12.1
SR
J22
MR RMT IN
MR IND
PL +12V
DIG GND
MULTI ROOM assembly
R91 680
D67 RD5.1ESB
MULTI ROOM IN
AKN1020
C67 0.01
C66 0.01
CN25
AKP1059
To L AUDIO IN
GND
To R AUDIO IN
GND
From L OUT
CONT
From R OUT
GND
From S.L OUT
GND
From S.R OUT
GND
To L POWER IN
GND
To R POWER IN
To VSP
VSP ON/OFF
S76
R98 10
ASH1009
J23
To L AUDIO IN
From L OUT
GND
From R OUT
To R AUDIO IN
GND
To L POWER IN
From S.L OUT
GND
From S.R OUT
To R POWER IN
To LATCH assembly (102) (To page 41)
To SIDE assembly CN23 (To page 20)
J13
To GEQ L
From GEQ L
GND
From GEQ R
To GEQ R
GND
TUNER MUT
FM MONO
STEREO
TUNED
DATA
CLK
CE
9k/10k
FUNC MUTE
MUTE
MONO
STEREO
TUNE
PLL DATA
PLL CLK
PLL STB
9k/10k
To SIDE assembly CN13 (To page 19)
J10
-30V
FL AC1
FL AC2
-12V(SIG)
+12V(SIG)
REMOTE
DIG GND
+5.6V
PL +12V
To POWER assembly CN10 (To page 43)
ST8 S61
ST4 S65
MEMORY S69
ST7 S62
ST3 S66
BAND S70
FM MONO S74
ST6 S63
ST2 S67
F UP S71
CLOCK ADJ S73
ST5 S64
ST1 S68
F DOWN S72
SET S75
KO3
KO4
KO5
KO6
KI1
KI2
KI3
KI4
V51 AAV1070
F1
F1
NP
10G
9G
8G
7G
6G
5G
4G
3G
2G
1G
F2
F2
TUNED
STEREO
MAIN
SUB
LOCAL
WAKE UP
1
2
TIMER
REC
MONO
DECK
II
ON
SLEEP
TV
FM
AM
MHz
KHz
M
S
REC
TIME


1
2
3
4
5
6
A
B
C
To HEAD PHONE assembly ⑭
(To page 40)
To DECK CONTROL assembly CN21
(To page 38)
Q56 IC53
Q62 Q57-Q60
Q51-Q54
IC52
IC51
Q101
Q103
Q105
Q107
Q109
Q116 Q114 Q115 IC102 Q117 IC103
IC104 Q118
IC105
Q119
IC
VR101
VR103
VR105
VR107
VR109
ANP1383-A
V51
PD4269
5.1
35
ST1
ST2
ST3
ST4
ST7
ST8
ST9
ST10
SHIELD assembly
To SIDE assembly CN23
(To page 17)
J23
TO R POWER IN
FROM S.R OUT
GND
FROM S.L OUT
TO L POWER IN
GND
TO R AUDIO IN
FROM R OUT
GND
FROM L OUT
TO L AUDIO IN
TOL AUDIO IN
GND
TOR AUDIO IN
GND
FROM L OUT
GND
FROM R OUT
GND
FROM S.L OUT
GND
FROM S.R OUT
GND
TO LPOWER IN
TO R POWER IN
CN25
VSP
OFF
ON
S76
TO VSP
MULTI ROOM IN
J22
RMT IN
MR IND
PL +12V
DIG GND
MULTI ROOM assembly
To LATCH assembly (102)
(To page 37)
POWER
J22
MR RMT
MR IND
PL +12V
DIG GND
J10
30V
AC1
AC2
12V
REMOTE
D GND
5.6V
-12V
REMOTE CONTROL
AXX1010
MULTI
ROOM
RED
5.0
OM74LS03P
SN74LS05N
J17
J21
FUNC
DATA1
DATA2
SCK
K00
K01
K03
K04
K06
K16
K17
SD
S1
INH
B
A
4052
4052
4052
VIDEO AUX
TAPE
TUNER
PHONO
CD
To POWER assembly CN10
(To page 40)


To LATCH assembly (108)
(To page 37)
D
100HZ
330HZ
1KHZ
3.3KHZ
10KHZ
BA6144
100HZ
330HZ
1KHZ
3.3KHZ
10KHZ
BA6144
BA6144
BA6144
FRONT assembly (AWZ2793)
3
4
5
6

NOTE

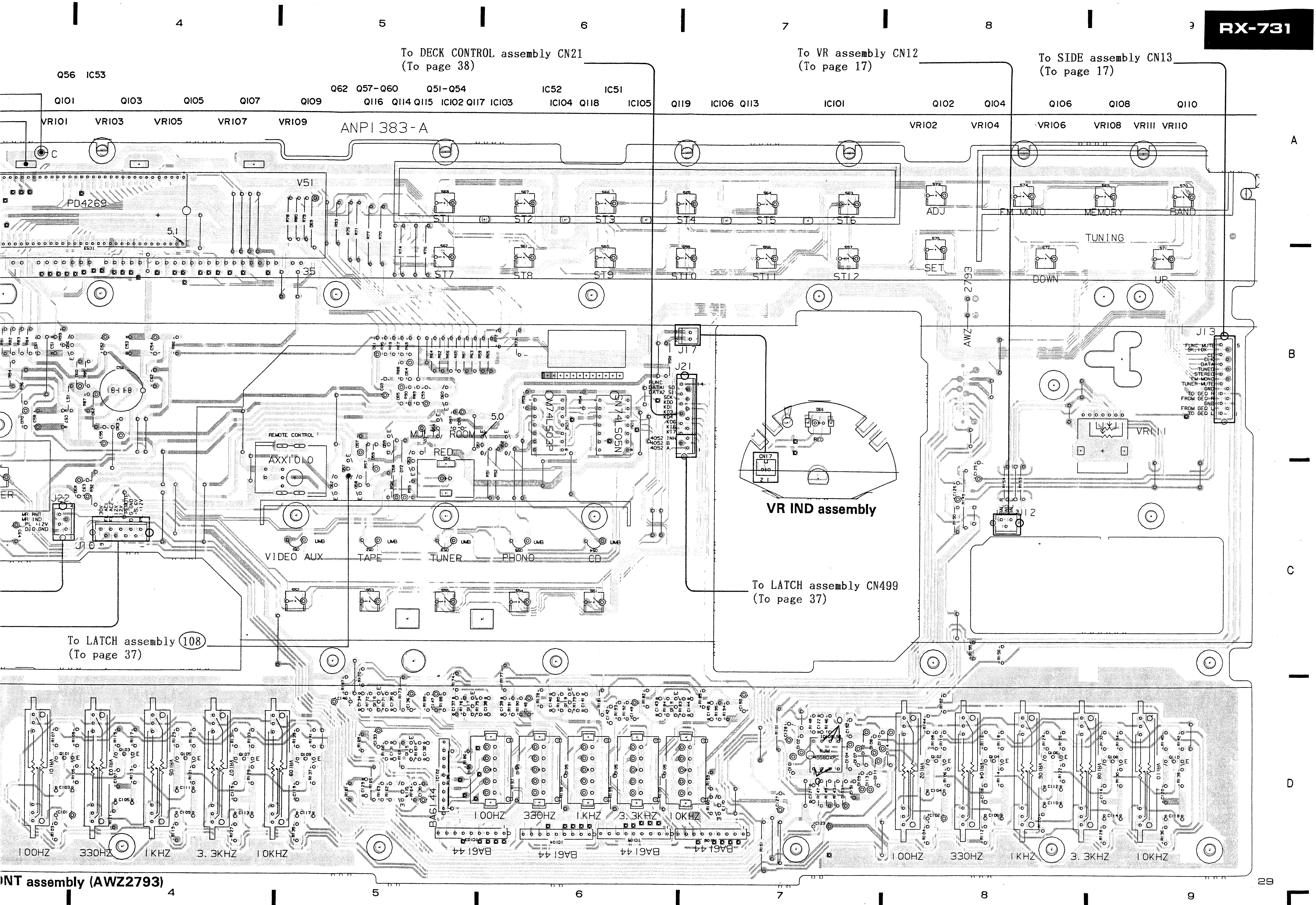
1. This P.C.B connection diagram is viewed from the parts mounted side.
2. The parts which have been mounted on the board can be replaced with those shown with the corresponding wiring symbols listed in the following Table.

P.C.B. pattern diagram indication	Corresponding part symbol	Part Name
E○ Q504 ○ ○	E○ ○ ○ or E○ ○ ○	Transistor
Q215 ○ ○ ○	or	Radiator type transistor
◎ D203 ○	○—▶|—○ D203	Diode
○ R237 ○	○—W—○ R237	Resistor
◎ C513 ○	○—|⊢+—○	Capacitor (Polarity)
C518	○—||—○	Capacitor (Non-polarity)

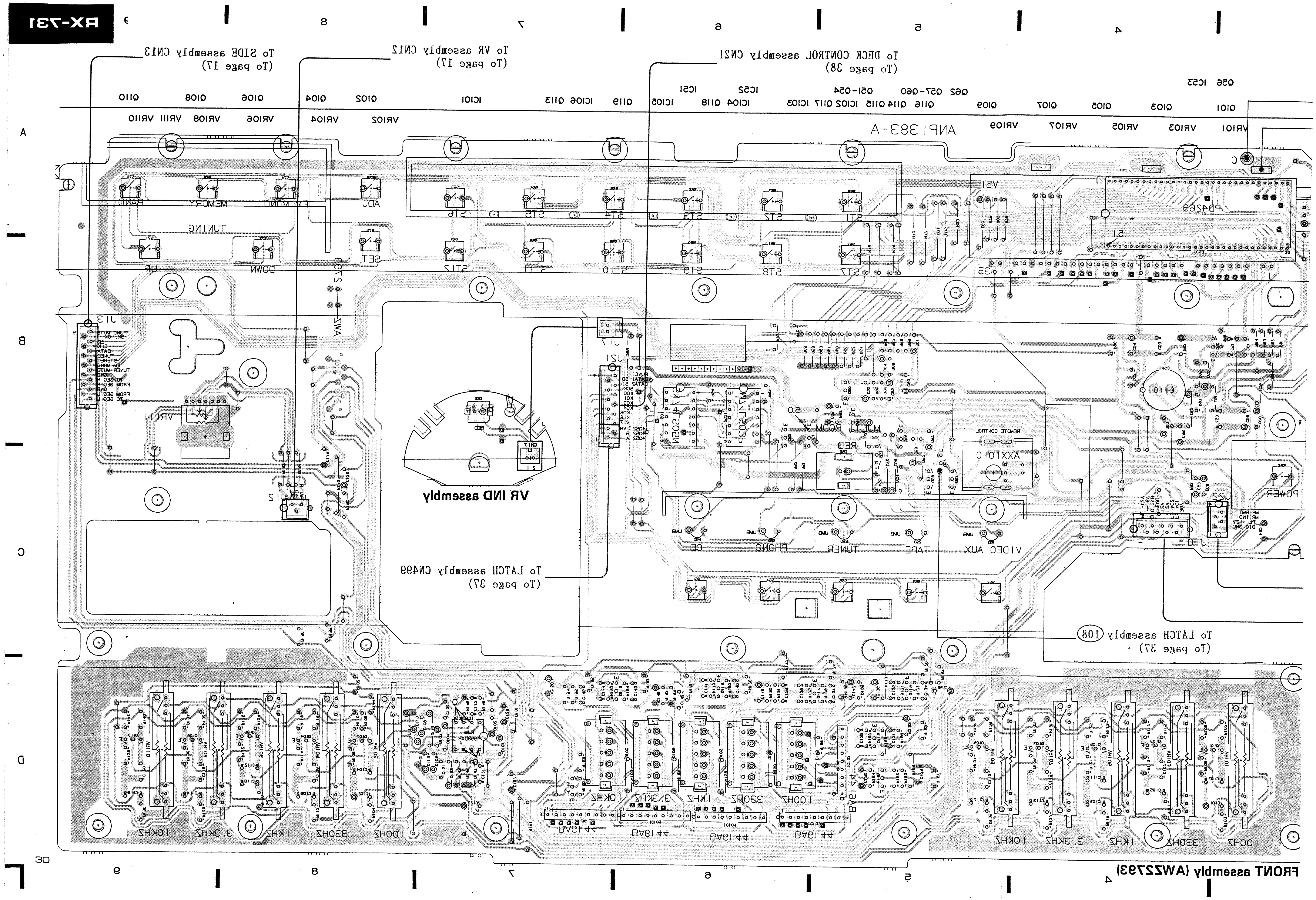
Others

P.C.B. pattern diagram indication	Part Name
IC	IC
S	Switch
RY	Relay
L	Coil
F	Filter
VR	Variable resistor or Semi-fixed resistor

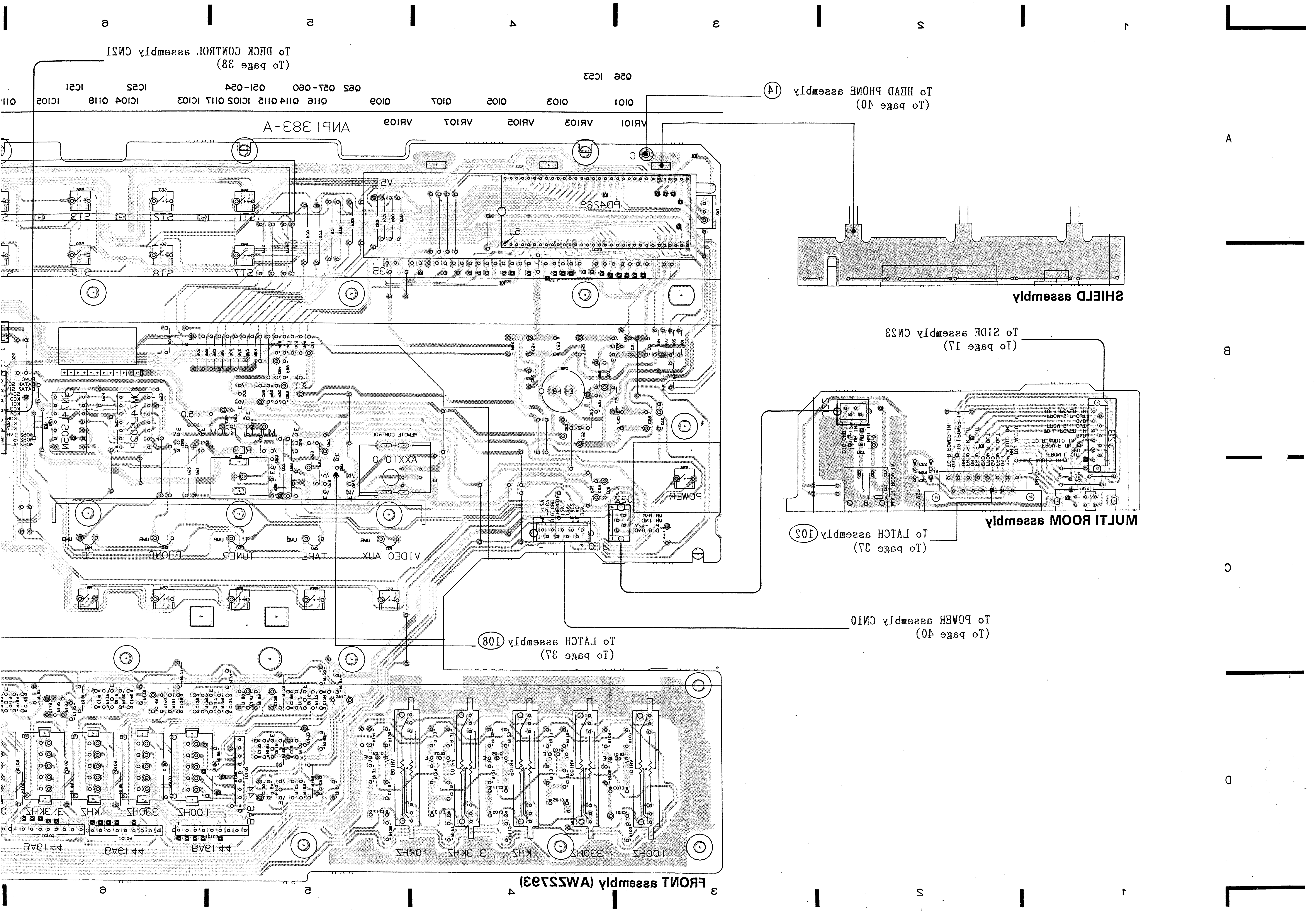
3. The capactor terminal marked with ◎ (double circles) shows negatine termianl.
4. The diode terminal marked with ◎ (double circles) shows cathode side.
5. The transistor terminal to which E is affixed shows the emitter.

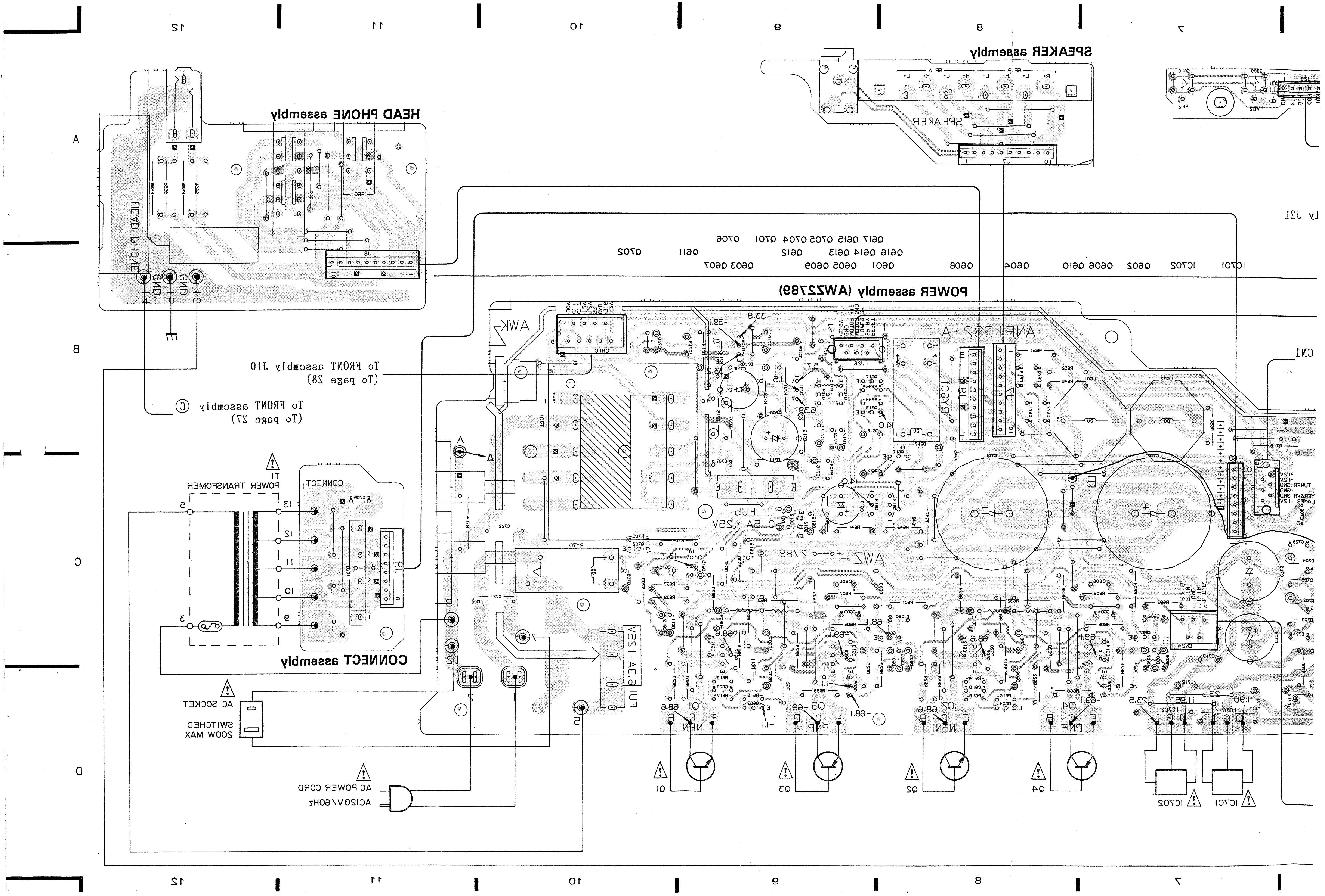

4
5
6
7
8
9
A
B
C
D
To DECK CONTROL assembly CN21
(To page 38)
To VR assembly CN12
(To page 17)
To SIDE assembly CN13
(To page 17)
Q56 IC53
Q101 Q103 Q105 Q107 Q109
Q62 Q57-Q60 Q51-Q54
Q116 Q114 Q115 IC102 Q117 IC103
IC52 IC51
IC104 Q118 IC105
Q119 IC106 Q113 IC101 Q102 Q104 Q106 Q108 Q110
VR101 VR103 VR105 VR107 VR109
ANP1383-A
VR102 VR104 VR106 VR108 VR111 VR110
V51
PD4269
ST1 ST2 ST3 ST4 ST5 ST6
ST7 ST8 ST9 ST10 ST11 ST12
ADJ
SET
FM MONO
MEMORY
BAND
TUNING
DOWN
UP
AWZ 2793
J13
J17
J21
FUNC MUTE
CLK
DATA
TUNED
STEREO
FM MONO
TUNER MUTE
GND
TO GEQ R
FROM GEQ R
GND
FROM GEQ L
TO GEQ L
FUNC
DATA1 S0
DATA2 S1
SCK
K00
K01
K03
K04
K08
K16
K17
INH
B
A
SN74LS03P
SN74LS05N
MULTI ROOM
5.0
RED
REMOTE CONTROL
AXX1010
VR111
J12
VR IND assembly
CN17
D66
RED
J22
MR RMT
MR IND
PL +12V
DIG GND
J10
VIDEO AUX
TAPE
TUNER
PHONO
CD
To LATCH assembly CN499
(To page 37)
To LATCH assembly ⑩⑧
(To page 37)
100HZ 330HZ 1KHZ 3.3KHZ 10KHZ
BA6144
NJM4558DXP
100HZ 330HZ 1KHZ 3.3KHZ 10KHZ
100HZ 330HZ 1KHZ 3.3KHZ 10KHZ
BA6144 BA6144 BA6144 BA6144

NT assembly (AWZ2793)

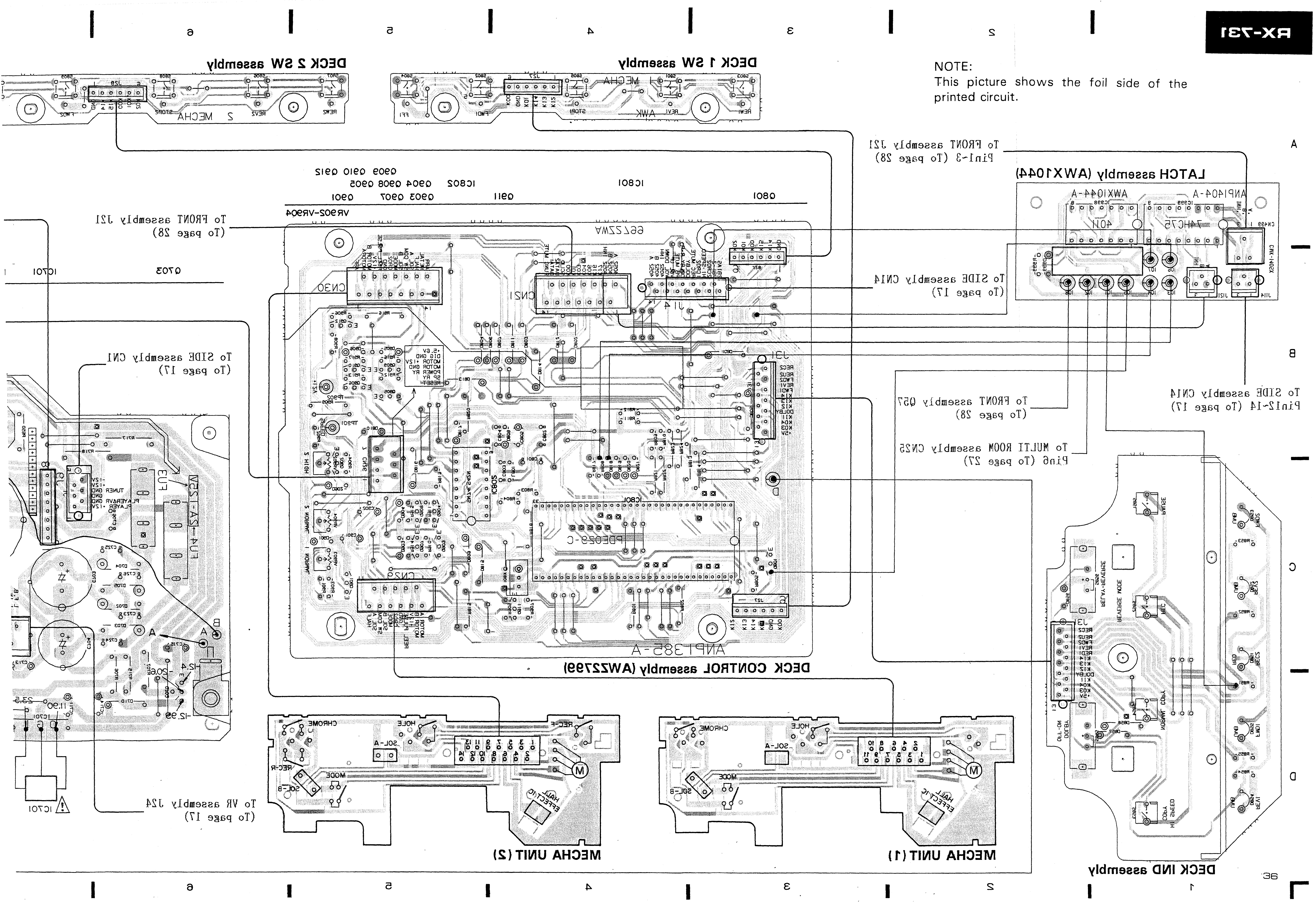

9
8
7
6
5
4
A
B
C
D
To SIDE assembly CN13
(To page 17)
To VR assembly CN12
(To page 17)
To DECK CONTROL assembly CN21
(To page 38)
Q110
Q108
Q106
Q104
Q102
IC101
IC106 Q113
Q119
IC105
IC51
Q118
IC52
IC104
IC102 Q117 IC103
Q51-Q54
Q114 Q115
Q57-Q60
Q116
Q62
Q109
Q107
Q105
Q103
Q56 IC53
Q101
VR110 VR111
VR108
VR106
VR104
VR102
VR109
VR107
VR105
VR103
VR101
ANP1383-A
BAND
MEMORY
FM MONO
ADJ
TUNING
UP
DOWN
SET
ST1
ST2
ST3
ST4
ST5
ST6
ST7
ST8
ST9
ST10
ST11
ST12
VS1
PD4269
C
J13
FUNC MUTE
9K, 10K
CE
CLK
DATA
TUNED
STEREO
FM-MONO
TUNER MUTE
GND
TO GEQ R
FROM GEQ R
GND
FROM GEQ L
TO GEQ L
VR111
AW2
J17
J21
LATCH
DATA
SCK
K00
K01
K02
K03
K04
K10
K11
INH
4052
J12
VR IND assembly
RED
CN17
MULTI ROOM
RED
REMOTE CONTROL
AXX1010
POWER
J22
J10
CD
PHONO
TUNER
TAPE
VIDEO AUX
To LATCH assembly CN499
(To page 37)
To LATCH assembly (108)
(To page 37)
MLH
10KHZ
3.3KHZ
1KHZ
330HZ
100HZ
±12dB

FRONT assembly (AWZ2793)

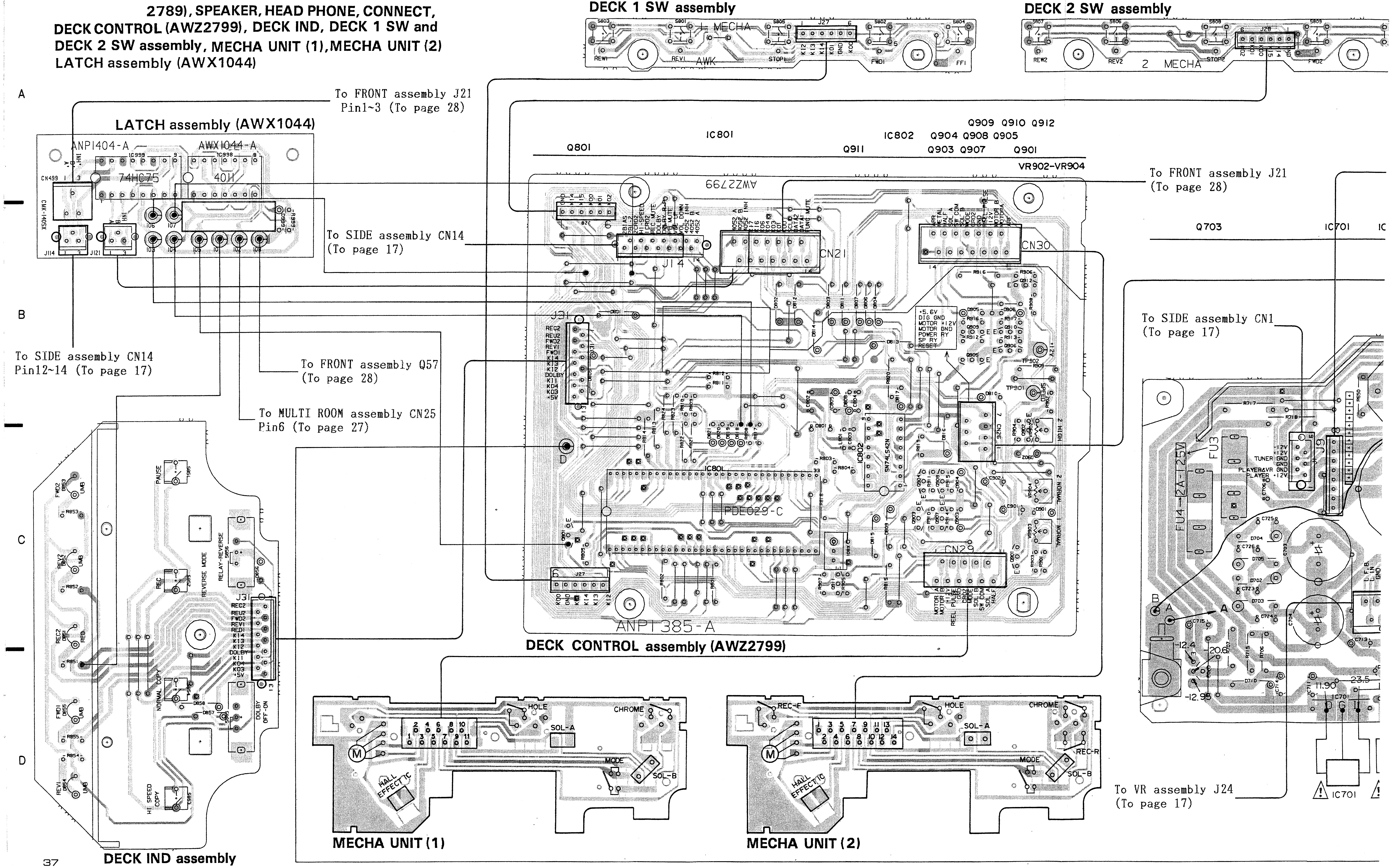

To DECK CONTROL assembly CN21
(To page 38)
To HEAD PHONE assembly ⑭
(To page 40)
ANP1383-A
SHIELD assembly
To SIDE assembly CN23
(To page 17)
MULTI ROOM assembly
To LATCH assembly (102)
(To page 37)
To POWER assembly CN10
(To page 40)
To LATCH assembly (108)
(To page 37)
PD4269
AXX1010
REMOTE CONTROL
POWER
MULTI ROOM
RED
CD
PHONO
TUNER
TAPE
VIDEO AUX
100HZ
330HZ
1KHZ
3.3KHZ
10KHZ
FRONT assembly (AWZ2793)
Q101 Q103 Q105 Q107 Q109 Q116 Q114 Q115 IC102 Q117 IC103 IC104 Q118 IC105
Q56 IC53 Q62 Q57-Q60 Q51-Q54 IC52 IC51
VR101 VR103 VR105 VR107 VR109
1
2
3
4
5
6
A
B
C
D

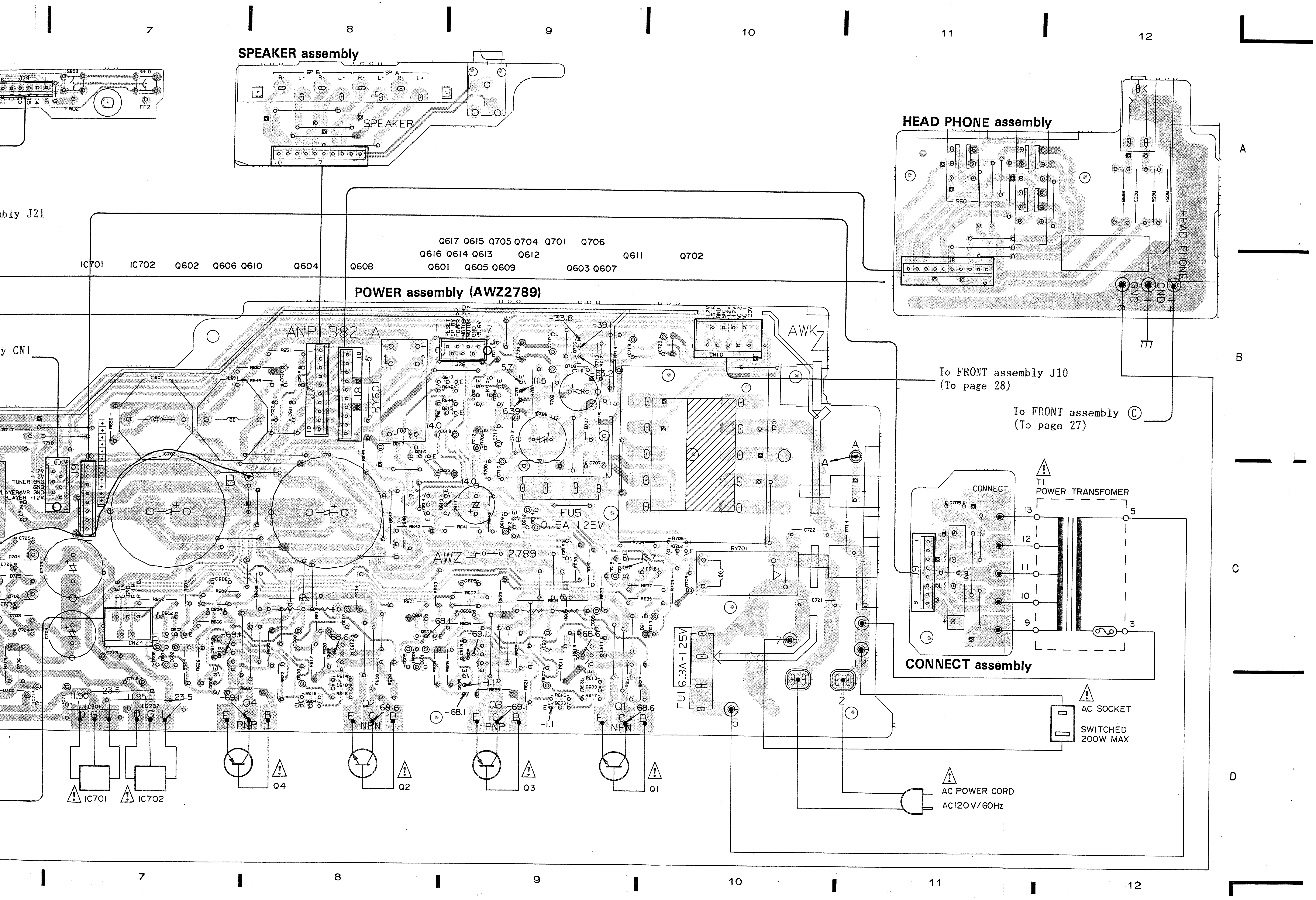

12
11
10
9
8
7
A
B
C
D
HEAD PHONE assembly
HEAD PHONE
GND
GND
4
5
3
J8
S601
SPEAKER assembly
SPEAKER
SP A
SP B
J7
POWER assembly (AWZ2789)
ANP1382-A
AWZ-2789
AWK
Q617 Q615 Q705 Q704 Q701 Q706
Q616 Q614 Q613 Q612 Q611 Q702
Q603 Q607 Q605 Q609 Q601 Q608 Q604 Q610 Q606 Q602 IC702 IC701
CN10
CN1
J26
RY601
RY701
FU5
0.5A-125V
FU1
3.15A-125V
-39.1
-33.8
1.5
5.7
6.3
1.4
14.0
13.7
68.9
-68.1
68.6
-69.1
-1.1
23.5
11.95
11.90
To FRONT assembly J10
(To page 28)
To FRONT assembly C
(To page 27)
T1
POWER TRANSFOMER
CONNECT
CONNECT assembly
13
12
11
10
9
5
3
AC SOCKET
SWITCHED
200W MAX
AC POWER CORD
AC120V/60Hz
Q1
Q3
Q2
Q4
NPN
PNP
B
C
E
IC702
IC701
-12V
+12V
TUNER GND
GND
LAYER +12V

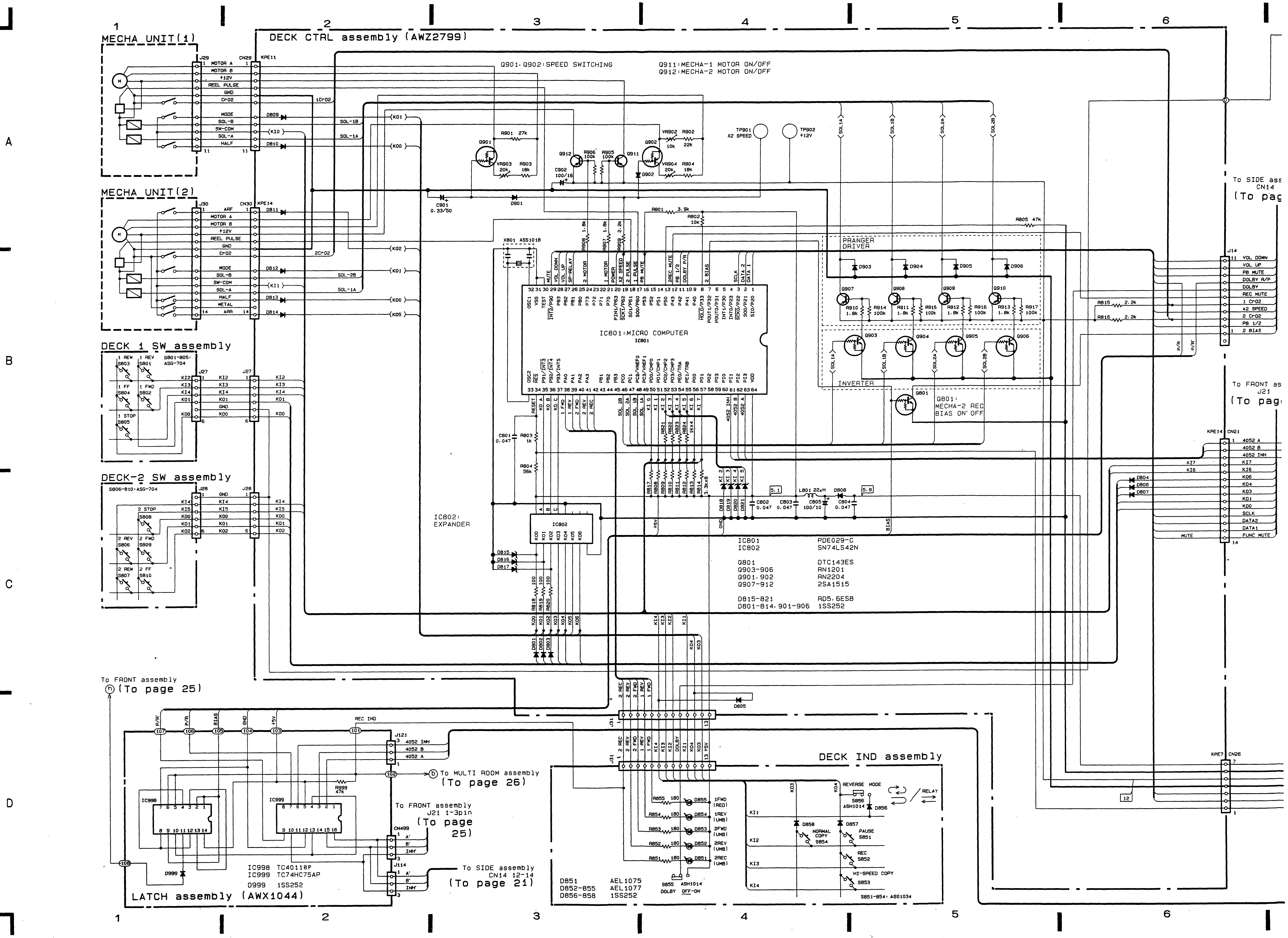
NOTE:
This picture shows the foil side of the printed circuit.

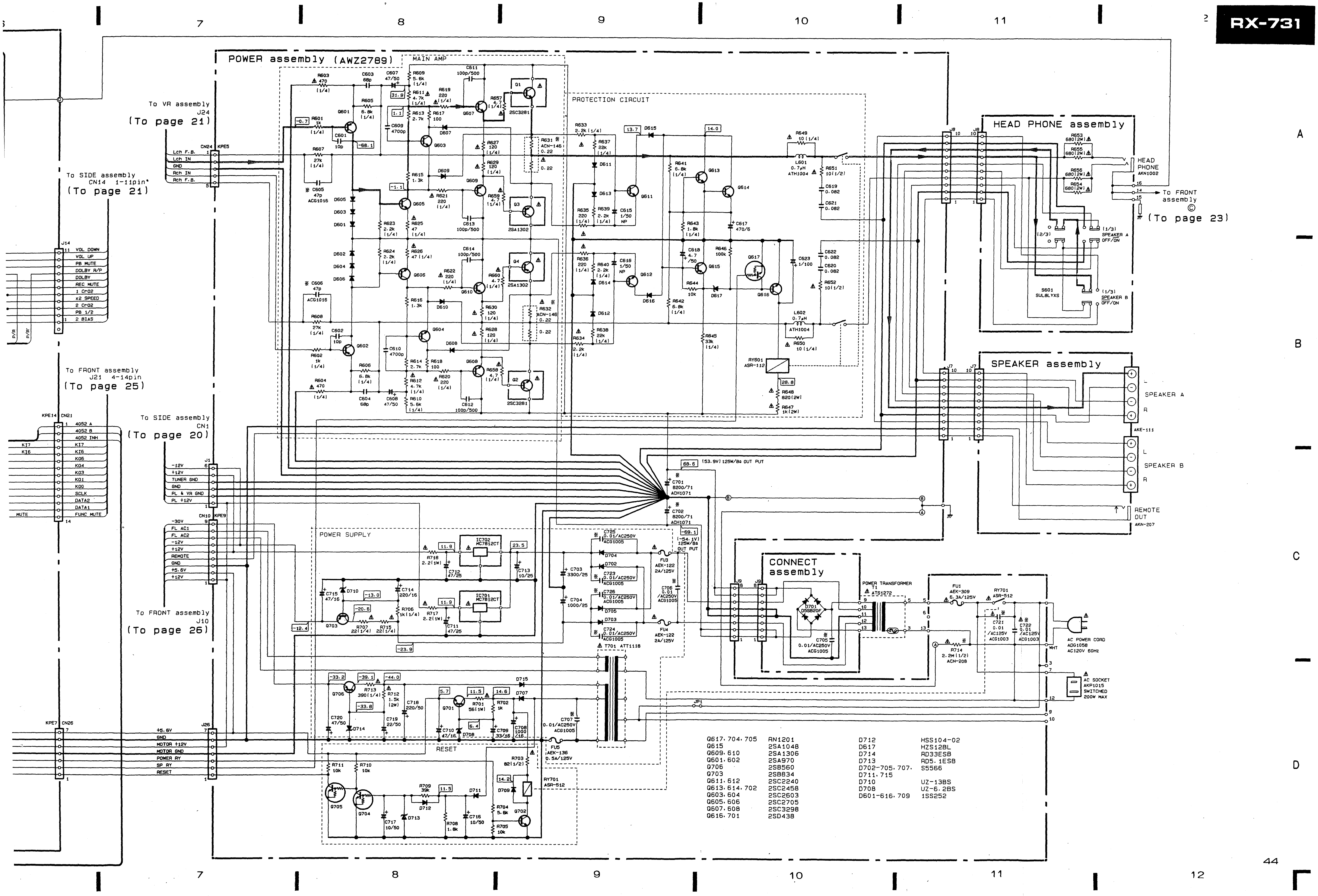

6
5
4
3
2
1
A
B
C
D
DECK 2 SW assembly
DECK 1 SW assembly
LATCH assembly (AWX1044)
To FRONT assembly J21
Pin1-3 (To page 28)
To FRONT assembly J21
(To page 28)
To SIDE assembly CN14
(To page 17)
To SIDE assembly CN1
(To page 17)
To FRONT assembly Q57
(To page 28)
To MULTI ROOM assembly CN25
Pin6 (To page 27)
To SIDE assembly CN14
Pin12-14 (To page 17)
To VR assembly J24
(To page 17)
DECK CONTROL assembly (AWZ799)
ANP1385-A
MECHA UNIT (2)
MECHA UNIT (1)
DECK IND assembly

2789), SPEAKER, HEAD PHONE, CONNECT, DECK CONTROL (AWZ2799), DECK IND, DECK 1 SW and DECK 2 SW assembly, MECHA UNIT (1), MECHA UNIT (2) LATCH assembly (AWX1044)


1
2
3
4
5
6
A
B
C
D
DECK 1 SW assembly
S803
S801
1 MECHA
S805
J27
S802
S804
REW1
REV1
AWK
STOP1
FWD1
FF1
K12 K13 K14 K01 GND K00
DECK 2 SW assembly
S807
S806
S808
J28
S809
REW2
REV2
2 MECHA
STOP2
FWD2
To FRONT assembly J21
Pin1~3 (To page 28)
LATCH assembly (AWX1044)
ANP1404-A
AWX1044-A
IC999
IC998
74HC75
4011
CN499
CMX-1405X
J114
J121
I06
I07
I05
I04
I03
I01
I02
I08
R999
D999
To SIDE assembly CN14
(To page 17)
To SIDE assembly CN14
Pin12~14 (To page 17)
To FRONT assembly Q57
(To page 28)
To MULTI ROOM assembly CN25
Pin6 (To page 27)
IC801
IC802
Q801
Q911
Q909 Q910 Q912
Q904 Q908 Q905
Q903 Q907
Q901
VR902-VR904
AWZ2799
To FRONT assembly J21
(To page 28)
J14
CN21
CN30
J31
REC2
REV2
FWD2
REV1
FWD1
K14
K13
K12
DOLBY
K11
K04
K03
+5V
+5.6V
DIG GND
MOTOR +12V
MOTOR GND
POWER RY
SP RY
RESET
TP902
TP901
CN29
IC801
PDE029-C
IC802
SN74LS42N
J27
K00 GND K01 K14 K13 K12
MOTOR A
MOTOR B
REEL PULSE
GND
MODE
SOL B
SW COM
SOL A
HALF
ANP1385-A
DECK CONTROL assembly (AWZ2799)
Q703
IC701
To SIDE assembly CN1
(To page 17)
FU3
FU4 2A-25V
J9
TUNER GND
PLAYER&VR GND
PLAYER +12V
-12.4
20.6
-12.95
11.90
23.5
IC701
To VR assembly J24
(To page 17)
IC701
DECK IND assembly
FWD2
R853
REV2
R852
REC2
R851
FWD1
R855
R854
REV1
PAUSE
REC
REVERSE MODE
RELAY-REVERSE
NORMAL COPY
DOLBY OFF-ON
HI SPEED COPY
J31
REC2
REV2
FWD2
REV1
REDI
K14
K13
K12
DOLBY
K11
K04
K03
+5V
MECHA UNIT (1)
HOLE
CHROME
SOL-A
MODE
SOL-B
HALL EFFECT IC
M
MECHA UNIT (2)
REC-F
HOLE
CHROME
SOL-A
REC-R
MODE
SOL-B
HALL EFFECT IC
M
1
2
3
4
5
6

7
8
9
10
11
12
A
B
C
D
SPEAKER assembly
SP B
SP A
R+
L+
R-
L-
SPEAKER
J7
J28
S809
S810
FWD2
FF2
mbly J21
HEAD PHONE assembly
S601
J8
R655
R653
R656
R654
HEAD PHONE
GND
GND
6
5
4
IC701
IC702
Q602
Q606
Q610
Q604
Q608
Q617
Q615
Q705
Q704
Q701
Q706
Q616
Q614
Q613
Q612
Q601
Q605
Q609
Q603
Q607
Q611
Q702
POWER assembly (AWZ2789)
ANP1382-A
AWZ-2789
AWK
y CN1
J26
J9
CN10
CN24
RY601
RY701
L601
L602
C701
C702
T701
FU5
0.5A-125V
FU1 6.3A-125V
-33.8
-39.1
33.2
5.7
11.5
6.39
14.0
14.0
13.7
-68.1
-69.1
68.6
-69.1
68.6
-68.1
-69.1
-1.1
-69.1
68.6
-68.1
-1.1
68.6
11.90
23.5
11.95
23.5
TUNER
PLAYER&VR
PLAYER
-12V
+12V
GND
B
A
To FRONT assembly J10
(To page 28)
To FRONT assembly Ⓒ
(To page 27)
CONNECT
CONNECT assembly
T1
POWER TRANSFOMER
13
12
11
10
9
5
3
7
2
AC SOCKET
SWITCHED
200W MAX
AC POWER CORD
AC120V/60Hz
E C B
PNP
NPN
PNP
NPN
Q4
Q2
Q3
Q1
O G I
IC701
IC702


MECHA UNIT(1)
DECK CTRL assembly (AWZ2799)
Q901,Q902:SPEED SWITCHING
Q911:MECHA-1 MOTOR ON/OFF
Q912:MECHA-2 MOTOR ON/OFF
J29
CN29
KPE11
MOTOR A
MOTOR B
+12V
REEL PULSE
GND
CrO2
MODE
SOL-B
SW-COM
SOL-A
HALF
D809
D810
SOL-1B
SOL-1A
KO1
KI0
KO0
TP901 X2 SPEED
TP902 +12V
R901 27k
VR903 20k
R903 18k
VR902 10k
R902 22k
VR904 20k
R904 18k
R906 100k
R905 100k
C902 100/16
D902
C901 0.33/50
D901
MECHA UNIT(2)
J30
CN30
KPE14
ARF
METAL
ARR
D811
D812
D813
D814
SOL-2B
SOL-2A
KO2
KI1
KO5
X801 ASS1018
R801 3.9k
R802 10k
R805 47k
PRANGER DRIVER
D903
D904
D905
D906
Q907
Q908
Q909
Q910
Q903
Q904
Q905
Q906
INVERTER
Q801
Q801: MECHA-2 REC BIAS ON/OFF
IC801:MICRO COMPUTER
IC802: EXPANDER
IC802
C801 0.047
R803 1k
R804 56k
D815
D816
D817
R818 100
R819 100
R820 100
D801
D802
D803
D818
D819
D820
D821
C802 0.047
C803 0.047
L801 22µH
C805 100/10
D808
C804 0.047
5.1
5.9
IC801 PDE029-C
IC802 SN74LS42N
Q801 DTC143ES
Q903-906 RN1201
Q901,902 RN2204
Q907-912 2SA1515
D815-821 RD5.6ESB
D801-814,901-906 1SS252
DECK 1 SW assembly
S801-805: ASG-704
1 REW S803
1 REV S801
1 FF S804
1 FWD S802
1 STOP S805
J27
KI2
KI3
KI4
KO1
KO0
GND
DECK-2 SW assembly
S806-810: ASG-704
J28
2 STOP S808
2 REV S806
2 FWD S809
2 REW S807
2 FF S810
KI5
To SIDE assembly CN14
(To page
J14
VOL DOWN
VOL UP
PB MUTE
DOLBY R/P
DOLBY
REC MUTE
1 CrO2
X2 SPEED
2 CrO2
PB 1/2
2 BIAS
R815 2.2k
R816 2.2k
To FRONT assembly J21
KPE14 CN21
4052 A
4052 B
4052 INH
KI7
KI6
KO6
KO4
KO3
SCLK
DATA2
DATA1
FUNC MUTE
D804
D806
D807
MUTE
To FRONT assembly
(h) (To page 25)
P/R'
P/R
BIAS
+5V
REC IND
J121
LATCH assembly (AWX1044)
IC998
IC999
R999 47k
D999
(b) To MULTI ROOM assembly (To page 26)
To FRONT assembly J21 1-3pin (To page 25)
CN499
J114
A'
B'
INH'
To SIDE assembly CN14 12-14 (To page 21)
IC998 TC40118P
IC999 TC74HC75AP
D999 1SS252
J31
D805
2 REC
2 REV
2 FWD
1 REV
1 FWD
DOLBY
DECK IND assembly
R855 180 D855 1FWD (RED)
R854 180 D854 1REV (UMB)
R853 180 D853 2FWD (UMB)
R852 180 D852 2REV (UMB)
R851 180 D851 2REC (UMB)
S855 ASH1014 DOLBY OFF-ON
D851 AEL1075
D852-855 AEL1077
D856-858 1SS252
REVERSE MODE
S856 ASH1014
D856
RELAY
D858
NORMAL COPY S854
D857
PAUSE S851
REC S852
HI-SPEED COPY S853
S851-854: ASG1034
KPE7 CN26
12
A
B
C
D
1
2
3
4
5
6


7
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9
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11
12
A
B
C
D
POWER assembly (AWZ2789)
MAIN AMP
PROTECTION CIRCUIT
POWER SUPPLY
RESET
HEAD PHONE assembly
SPEAKER assembly
CONNECT assembly
To VR assembly
J24
(To page 21)
To SIDE assembly
CN14 1-11pin*
(To page 21)
To FRONT assembly
J21 4-14pin
(To page 25)
To SIDE assembly
CN1
(To page 20)
To FRONT assembly
J10
(To page 26)
To FRONT assembly
Ⓒ
(To page 23)
Lch F.B.
Lch IN
GND
Rch IN
Rch F.B.
VOL DOWN
VOL UP
PB MUTE
DOLBY R/P
DOLBY
REC MUTE
1 CrO2
x2 SPEED
2 CrO2
PB 1/2
2 BIAS
4052 A
4052 B
4052 INH
K17
K16
K06
K04
K03
K01
K00
SCLK
DATA2
DATA1
FUNC MUTE
MUTE
-12V
+12V
TUNER GND
GND
PL & VR GND
PL +12V
-30V
FL AC1
FL AC2
REMOTE
+5.6V
+5.6V
GND
MOTOR +12V
MOTOR GND
POWER RY
SP RY
RESET
HEAD PHONE
AKN1002
SPEAKER A
OFF/ON
SPEAKER B
OFF/ON
S601
SUL8LYXS
SPEAKER A
SPEAKER B
AKE-111
REMOTE OUT
AKN-207
[53.9V] 125W/8Ω OUT PUT
(-54.1V) 125W/8Ω OUT PUT
C701 8200/71 ACH1071
C702 8200/71 ACH1071
IC702 MC7812CT
IC701 MC7812CT
T701 ATT1118
POWER TRANSFORMER T1 ATS1272
D701 D5SB20F
FU1 AEK-309 6.3A/125V
RY701 ASR-512
RY601 ASR-112
FU3 AEK-122 2A/125V
FU4 AEK-122 2A/125V
FU5 AEK-136 0.5A/125V
R714 2.2M(1/2) ACN-208
AC POWER CORD ADG1058 AC120V 60Hz
AC SOCKET AKP1015 SWITCHED 200W MAX
WHT
JP1
L601 0.7μH ATH1004
L602 0.7μH ATH1004
R631 ACN-146 0.22
R632 ACN-146 0.22
2SC3281
2SA1302

Q617, 704, 705	RN1201	D712	HSS104-02
Q615	2SA1048	D617	HZS12BL
Q609, 610	2SA1306	D714	RD33ESB
Q601, 602	2SA970	D713	RD5.1ESB
Q706	2SB560	D702-705, 707, D711, 715	S5566
Q703	2SB834		
Q611, 612	2SC2240	D710	UZ-13BS
Q613, 614, 702	2SC2458	D708	UZ-6.2BS
Q603, 604	2SC2603	D601-616, 709	1SS252
Q605, 606	2SC2705		
Q607, 608	2SC3298		
Q616, 701	2SD438		

4. P.C.B 's PARTS LIST

NOTES:

- *Parts without part number cannot be supplied.*
- *Parts marked by "◉" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *When ordering resistors, first convert resistance values into code form as shown in the following examples.*

Ex. 1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47k ohm (tolerance is shown by J = 5%, and K = 10%).

560Ω 56 × 10^1 561........................RD1/4PS 5⃞ 6⃞ 1⃞ J
47kΩ 47 × 10^3 473........................RD1/4PS 4⃞ 7⃞ 3⃞ J
0.5Ω 0R5..RN2H 0⃞ R⃞ 5⃞ K
1Ω 010..RS1P 0⃞ 1⃞ 0⃞ K

Ex. 2 When there are 3 effective digits (such as in high precision metal film resistors).

5.62kΩ 562 × 10^1 5621......................RN1/4SR 5⃞ 6⃞ 2⃞ 1⃞ F

POWER ASS'Y (AWZ2789)

SEMICONDUCTOR

Mark	No.	Description	Parts No.
	Q601,602	TRANSISTOR	2SA970
	Q603,604	TRANSISTOR	2SC2603
	Q605,606	TRANSISTOR	2SC2705
	Q607,608	TRANSISTOR	2SC3298
	Q609,610	TRANSISTOR	2SA1306
	Q611,612	TRANSISTOR	2SC2240
	Q613,614	TRANSISTOR	2SC2458
	Q615	TRANSISTOR	2SA1048
	Q616	TRANSISTOR	2SD438
	Q617	TRANSISTOR	RN1201
	Q701	TRANSISTOR	2SD438
	Q702	TRANSISTOR	2SC2458
	Q703	TRANSISTOR	2SB834
	Q704,705	TRANSISTOR	RN1201
	Q706	TRANSISTOR	2SB560
	D601−616	DIODE	1SS252
	D617	ZENER DIODE	HZS12BL
	D702−705	DIODE	S5566
	D707	DIODE	S5566
	D708	ZENER DIODE	UZ−6.2BS
	D709	DIODE	1SS252
	D710	ZENER DIODE	UZ−13BS
	D711	DIODE	S5566
	D712	DIODE	HSS104−02
	D713	ZENER DIODE	RD5.1ESB
	D714	ZENER DIODE	RD33ESB
	D715	DIODE	S5566

COILS & TRANSFORMER

Mark	No.	Description	Parts No.
	L601,602	COIL(0.7μH)	ATH1004
⚠	T701	POWER TRANSFORMER	ATT1118

RELAIES

Mark	No.	Description	Parts No.
	RY601	RELAY	ASR−112
⚠	RY701	RELAY	ASR−512

CAPACITORS

Mark	No.	Description	Parts No.
	C601,602	CERAMIC CAPACITOR	CCMSL100D50
	C603,604	CERAMIC CAPACITOR	CCMSL680J50
	C605,606	CERAMIC CAPACITOR (47p/50V)	ACG1016
	C607,608	ELECTR.CAPACITOR	CEAS470M50
	C609,610	CERAMIC CAPACITOR	CKCYB472K50
	C611−614	CERAMIC CAPACITOR	CCCSL101K500
	C615,616	ELECTR.CAPACITOR	CEANP010M50
	C617	ELECTROLYTIC CAPACIT	CEAS471M6
	C618	ELECTR.CAPACITOR	CEAS4R7M50
	C619−622	AUDIO FILM CAPACITOR	CFTXA823J50
	C623	ELECTR.CAPACITOR	CEAS010M100
	C701,702	ELECTROLYTIC CAPACITOR(8200/71V)	ACH1071
	C703	ELECTR.CAPACITOR	CEAS332M25
	C704	ELECTR.CAPACITOR	CEAS102M25
	C706,707	CKA (0.01/AC250V)	ACG1005
	C708	ELECTR.CAPACITOR	CEAS102M16
	C709	ELECTR.CAPACITOR	CEAS330M16
	C710	ELECTR.CAPACITOR	CEAS470M16
	C711,712	ELECTR.CAPACITOR	CEAS470M25
	C713	ELECTR.CAPACITOR	CEAS100M25
	C714	ELECTR.CAPACITOR	CEAS221M16
	C715	ELECTR.CAPACITOR	CEAS470M16
	C716,717	ELECTR.CAPACITOR	CEAS100M50
	C718	ELECTR.CAPACITOR	CEAS221M50
	C719	ELECTR.CAPACITOR	CEAS220M50
	C720	ELECTR.CAPACITOR	CEAS470M50
⚠	C721,722	CKA (0.01/AC400V)	ACG1003
	C723−726	CKA (0.01/AC250V)	ACG1005

RESISTORS

Mark	No.	Description	Parts No.
⚠	R603,604	FUSEBLE RESISTOR	RFA1/4PS471J
⚠	R611,612	CARBON FILM RESISTOR	RD1/4PMF472J
	R613,614	CARBON FILM RESISTOR	RD1/8PM272J
	R615,616	CARBON FILM RESISTOR	RD1/8PM132J
	R617,618	CARBON FILM RESISTOR	RD1/8PM101J
⚠	R619−622	FUSEBLE RESISTOR	RFA1/4PS221J
⚠	R625,626	FUSEBLE RESISTOR	RFA1/4PS470J
⚠	R627−630	FUSEBLE RESISTOR	RFA1/4PS121J
⚠	R631,632	RESISTOR (0.22,5W)	ACN−146
⚠	R633,634	CARBON FILM RESISTOR	RD1/4PMF221J
⚠	R635,636	FUSEBLE RESISTOR	RFA1/4PS221J
	R644	CARBON FILM RESISTOR	RD1/8PM103J
	R646	CARBON FILM RESISTOR	RD1/8PM104J
⚠	R647	METAL OXIDE RESISTOR	RS2LMF102J
⚠	R648	METAL OXIDE RESISTOR	RS2LMF821J
⚠	R649,650	FUSEBLE RESISTOR	RFA1/4PS100J
⚠	R651,652	CARBON FILM RESISTOR	RD1/2PMF100J
⚠	R657−660	FUSEBLE RESISTOR	RFA1/4PS4R7J
⚠	R701	METAL OXIDE RESISTOR	RS1PMF560J
	R702	CARBON FILM RESISTOR	RD1/8PM102J
⚠	R703	CARBON FILM RESISTOR	RD1/2PMF820J
	R704	CARBON FILM RESISTOR	RD1/8PM562J
	R705	CARBON FILM RESISTOR	RD1/8PM103J
⚠	R707	FUSEBLE RESISTOR	RFA1/4PS220J
	R708	CARBON FILM RESISTOR	RD1/8PM182J
	R709	CARBON FILM RESISTOR	RD1/8PM393J
	R710,711	CARBON FILM RESISTOR	RD1/8PM103J
⚠	R712	METAL OXIDE RESISTOR	RS2LMF152J
⚠	R713	FUSEBLE RESISTOR	RFA1/4PS391J
⚠	R714	RESISTOR (2.2M,1/2W)	ACN−208
⚠	R715	FUSEBLE RESISTOR	RFA1/4PS220J
⚠	R717,718	METAL OXIDE RESISTOR	RS1PMF2R2J
		Other resistors	RD1/4PM□□□J

OTHERS

Mark	No.	Description	Parts No.
	CN10	JUMPER CONNECTOR 9−P	KPE9
	CN24	JUMPER CONNECTOR 5−P	KPE5

SPEAKER ASS'Y

OTHERS

Mark	No.	Description	Parts No.
		SPEAKER TERMINAL 8−P	AKE−111
		JACK	AKN−207

HEAD PHONE ASS'Y

SWITCH

Mark	No.	Description	Parts No.
	S601	PUSH SWITCH	SUL8LYXS

RESISTORS

Mark	No.	Description	Parts No.
⚠	R653−656	METAL OXIDE RESISTOR	RS2LMF681J

OTHER

Mark	No.	Description	Parts No.
		JACK	AKN1002

CONNECT ASS'Y

SEMICONDUCTOR

Mark	No.	Description	Parts No.
	D701	DIODE	D5SB20F

CAPACITOR

Mark	No.	Description	Parts No.
	C705	CKA (0.01/AC250V)	ACG1005

FRONT ASS'Y (AWZ2793)

SEMICONDUCTORS

Mark	No.	Description	Parts No.
	IC101	OP−AMP IC	NJM4558DXP
	IC102−106	DISPLAY IC	BA6144
	IC51	LOGIC IC	SN74LS05N
	IC52	LLOGIC IC	M74LS03P
	IC53		PD4269
	Q101−110	TRANSISTOR	2SC1740SLN
	Q113−119	TRANSISTOR	2SC2458
	Q51,52	TRANSISTOR	DTA143ES
	Q53,54	TRANSISTOR	RN2201
	Q56	TRANSISTOR	DTC124ES
	Q57	TRANSISTOR	RN2201
	Q58	TRANSISTOR	RN1201
	Q59	TRANSISTOR	RN2201
	Q60	TRANSISTOR	2SC1740S
	Q62	TRANSISTOR	RN1203

Mark	No.	Description	Parts No.
	D101-104	DIODE	1SS252
	D105	LED	AEL1111
	D107-114	DIODE	1SS252
	D51-55	LED	AEL1077
	D56	LED(RED)	AEL1038
	D57-60	DIODE	1SS252
	D61	ZENER DIODE	RD15ESB
	D62-65	DIODE	1SS252
	D68	ZENER DIODE	RD5.1ESB
	D69	DIODE	1SS252
	D70	ZENER DIODE	RD7.5ESB
	D71,72	DIODE	1SS252

COILS

Mark	No.	Description	Parts No.
	L51	AXIAL INDUCTOR	LAU220K

SWITCHES

Mark	No.	Description	Parts No.
	S51-75	SWITCH (ST 1-12,MEMORY, BAND,F UP,F DOWN, CLOCK ADJ,FM MONO,SET,CD,TAPE,PHONO,TUNER,POWER, VIDEO/AUX)	ASG1034

CAPACITORS

Mark	No.	Description	Parts No.
	C101,102	ELECTROLYTIC CAPACITOR	CEJAR33M50
	C103,104	CERAMIC CAPACITOR	CKDYX393M25
	C105,106	AUDIO FILM CAPACITOR	CFTXA124J50
	C107,108	CERAMIC CAPACITOR (0.01/50V)	ACG1021
	C109,110	CERAMIC CAPACITOR	CKDYX393M25
	C111,112	CERAMIC CAPACITOR	CKDYB392K50
	C113,114	CERAMIC CAPACITOR	CKDYX153M25
	C115,116	CERAMIC CAPACITOR (1000p/50V)	ACG1020
	C117,118	CERAMIC CAPACITOR	CKDYB332K50
	C119,120	CERAMIC CAPACITOR (470p/50V)	ACG1019
	C121,122	CERAMIC CAPACITOR	CCMSL820J50
	C123	ELECTR.CAPACITOR	CEAS101M16
	C125,126	ELECTR.CAPACITOR	CEAS2R2M50
	C127,128	ELECTR.CAPACITOR	CEAS470M16
	C129	CERAMIC CAPACITOR	CKCYF473Z50
	C130	ELECTR.CAPACITOR	CEAS330M16
	C131,132	CERAMIC CAPACITOR	CKCYX473M25
	C133	ELECTR.CAPACITOR	CEASR33M50
	C134,135	CERAMIC CAPACITOR	CKCYX183M25
	C136	ELECTR.CAPACITOR	CEASR22M50
	C137,138	CERAMIC CAPACITOR	CKCYB682K50
	C139	CERAMIC CAPACITOR	CKCYX333M25
	C140,141	CERAMIC CAPACITOR	CKCYB272K50
	C142	CERAMIC CAPACITOR (0.022/50V)	ACG1022
	C143,144	CERAMIC CAPACITOR	CKCYB821K50
	C145	CERAMIC CAPACITOR	CKCYB332K50
	C146-150	ELECTR.CAPACITOR	CEAS100M25
	C151,152	CERAMIC CAPACITOR (47p/50V)	ACG1016
	C51	CERAMIC CAPACITOR	CKCYX473Z25
	C52	ELECTR.CAPACITOR	CEAS4R7M50
	C53	CERAMIC CAPACITOR	CKCYF103Z50
	C54	ELECTR.CAPACITOR	CEAS100M50
	C55	ELECTR.CAPACITOR	CEAS470M16
	C56	CEA (47000/5.5V)	ACH1070
	C57	CERAMIC CAPACITOR	CKCYX473M25
	C58	ELECTR.CAPACITOR	CEAS470M16
	C59	ELECTR.CAPACITOR	CEASR22M50
	C60	ELECTR.CAPACITOR	CEAS100M50
	C61,62	CERAMIC CAPACITOR (1000p/50V)	ACG1020
	C63	ELECTR.CAPACITOR	CEAS470M16
	C64	ELECTR.CAPACITOR	CEAS100M50
	C65	ELECTR.CAPACITOR	CEAS4R7M50

RESISTORS

Mark	No.	Description	Parts No.
	VR101-110	VR(100k)	ACU1032
	VR111	VR(250k)	ACS1052
	R100	CARBON FILM RESISTOR	RD1/4PM390J
	R196-199	CARBON FILM RESISTOR	RD1/4PM390J
	R56	CARBON FILM RESISTOR	RD1/2PM821J
	R92	CARBON FILM RESISTOR	RD1/2PM271J
	R96	CARBON FILM RESISTOR	RD1/4PM562J
		Other resistors	RD1/8PM□□□J

OTHERS

Mark	No.	Description	Parts No.
		2-P HAUSING	ADX1190
		REMOTE RECEIVER UNIT	AXX1010
	V51	FL TUBE	AAV1070
	X51	CERAMIC RESONATOR (4.19MHz)	ASS1018

MULTI ROOM ASSEMBLY

SEMICONDUCTOR

Mark	No.	Description	Parts No.
	D67	ZENER DIODE	RD5.1ESB

SWITCH

Mark	No.	Description	Parts No.
	S76	SLIDE SWITCH(VSP)	ASH1009

CAPACITORS

Mark	No.	Description	Parts No.
	C66,67	CERAMIC CAPACITOR	CKCYF103Z50

RESISTORS

Mark	No.	Description	Parts No.
	R91	CARBON FILM RESISTOR	RD1/8PM681J
	R98	CARBON FILM RESISTOR	RD1/8PM100J

OTHER

Mark	No.	Description	Parts No.
		JACK (MULTI ROOM IN)	AKN1020

VR IND ASSEMBLY

SEMICONDUCTOR

Mark	No.	Description	Parts No.
	D66	LED(RED)	AEL1040

SHIELD ASSEMBLY

There is no supply parts on this assembly

SIDE ASSEMBLY (AWZ2797)

SEMICONDUCTORS

Mark	No.	Description	Parts No.
	IC201	AM/FM IC	LA1265S
	IC202	PLL IC	LM7001
	IC203	MPX IC	AN7470P
	IC301,302	OP-AMP IC	NJM4558DXP
	IC303	LOGIC IC	TC4052BP
	IC304	OP-AMP IC	NJM4558DXP
	IC401	LOGIC IC	TC4066BP
	IC402	OP-AMP IC	NJM4558DXP
	IC403	LOGIC IC	TC4066BP
	IC404	DOLBY-B IC	CXA1100P
	IC405	LOGIC IC	SN74LS05N
	IC406	OP-AMP IC	NJM4558DXP
	Q201	MOS FET	S2K241
	Q202	TRANSISTOR	2SC2786
	Q203	TRANSISTOR	2SC2668
	Q204	N-FET	2SK161
	Q205	TRANSISTOR	2SC2668
	Q206,207	TRANSISTOR	RN2201
	Q208	TRANSISTOR	2SC1740SLN
	Q209	N-FET	2SK246
	Q210	TRANSISTOR	2SC1740S
	Q301,302	TRANSISTOR	2SC1740S
	Q303	TRANSISTOR	2SA933S
	Q304	TRANSISTOR	2SA1048
	Q305,306	TRANSISTOR	2SC2878
	Q307	TRANSISTOR	2SD438
	Q308	TRANSISTOR	2SA970
	Q401,402	TRANSISTOR	2SC2458
	Q403,404	N-FET	2SK373
	Q405-410	TRANSISTOR	2SC2458
	Q411,412	TRANSISTOR	2SA1515
	Q413	TRANSISTOR	2SA1048
	Q414	TRANSISTOR	2SC2603
	Q415	TRANSISTOR	RN1203
	Q416	TRANSISTOR	RN2203
	Q417	TRANSISTOR	RN1201
	Q418-421	TRANSISTOR	RN1203
	Q423-426	TRANSISTOR	2SC2458
	Q427	TRANSISTOR	DTC143ES
	Q428	TRANSISTOR	DTA143ES
	Q429,430	TRANSISTOR	2SC2878
	Q431,432	TRANSISTOR	2SC2458
	Q433	TRANSISTOR	2SA1048
	D201,202	VARI-CAP DIODE	ITT310
	D203-208	DIODE	1SS252
	D301	ZENER DIODE	RD5.6ESB3
	D302	ZENER DIODE	RD8.2ESB2
	D401-404	DIODE	MA859
	D405-416	DIODE	1SS252

FILTERS

Mark	No.	Description	Parts No.
	F201	CERAMIC FILTER	ATF-155
	F202,203	CERAMIC FILTER	ATF-107
	F204	CERAMIC FILTER	ATF-208
	F401,402	FILTER	ATF-210

COILS & TRANSFORMER

Mark	No.	Description	Parts No.
	L201	COIL	ATC1003
	L202	COIL	ATE-079
	L203,204	AXIAL INDUCTOR	LAU2R2M
	L401,402	AXIAL INDUCTOR	LAU221K
	L403,404	INDUCTOR	LTA822J
	L405,406	INDUCTOR	LTA272J
	L407	INDUCTOR	LTA102J
	T201	COIL	ATC-194
	T202	IF TRANSFORMER	ATE-063
	T401	OSC TRANSFORMER	ATX-043

SWITCH

Mark	No.	Description	Parts No.
	S401	SWITCH(BEAT CUT)	ASH1015

CAPACITORS

Mark	No.	Description	Parts No.
	C203	CERAMIC CAPACITOR	CCMCH040C50
	C204	CERAMIC CAPACITOR (0.01/50V)	ACG1021
	C205	CERAMIC CAPACITOR	CCDRH180J50
	C206	ELECTR.CAPACITOR	CEAS330M16
	C207	CERAMIC CAPACITOR	CCDCH020C50

Mark	No.	Description	Parts No.
	C208	CERAMIC CAPACITOR (0.01/50V)	ACG1021
	C209	CERAMIC CAPACITOR (100P/50V)	ACG1017
	C210	CERAMIC CAPACITOR	CCDCH010C50
	C211	CERAMIC CAPACITOR (0.01/50V)	ACG1021
	C212	CERAMIC CAPACITOR	CCMCH330J50
	C213	CERAMIC CAPACITOR	CCMCH150J50
	C214	CERAMIC CAPACITOR	CCMCH080D50
	C215	CERAMIC CAPACITOR (1000p/50V)	ACG1020
	C216	CERAMIC CAPACITOR	CCDTH150J50
	C217	CERAMIC CAPACITOR	CCMCH150J50
	C218−220	CERAMIC CAPACITOR (0.01/50V)	ACG1021
	C221	CERAMIC CAPACITOR (0.022/50V)	ACG1022
	C222	AUDIO FILM CAPACITOR	CFTXA104J50
	C223,224	CERAMIC CAPACITOR (0.022/50V)	ACG1022
	C225	ELECTR.CAPACITOR	CEAS330M16
	C226	CERAMIC CAPACITOR (47p/50V)	ACG1016
	C227	CERAMIC CAPACITOR (100p/50V)	ACG1017
	C228−230	CERAMIC CAPACITOR (0.022/50V)	ACG1022
	C231	ELECTR.CAPACITOR	CEAS330M16
	C232	ELECTR.CAPACITOR	CEAS010M50
	C233	CERAMIC CAPACITOR	CCDSL271J50
	C234	ELECTR.CAPACITOR	CEAS4R7M50
	C235	CERAMIC CAPACITOR (0.01/50V)	ACG1021
	C236	ELECTR.CAPACITOR	CEAS470M16
	C237	ELECTR.CAPACITOR	CEAS2R2M50
	C238	CERAMIC CAPACITOR	CKDYB222K50
	C239	CERAMIC CAPACITOR	CKDYF473Z50
	C240	AUDIO FILM CAPACITOR	CFTXA104J50
	C241	CERAMIC CAPACITOR (0.01/50V)	ACG1021
	C242	ELECTROLYTIC CAPACITOR	CEAS1R5M50
	C243	ELECTR.CAPACITOR	CEAS101M16
	C244,245	CERAMIC CAPACITOR	CCMCH150J50
	C246	CERAMIC CAPACITOR (100p/50V)	ACG1017
	C247	CERAMIC CAPACITOR (0.01/50V)	ACG1021
	C248	ELECTR.CAPACITOR	CEANP2R2M50
	C249	CERAMIC CAPACITOR	CKCYF473Z50
	C250	(470p/50V)	ACE1039
	C251	ELECTR.CAPACITOR	CEAS3R3M50
	C252	ELECTROLYTIC CAPACITOR	CEAS1R5M50
	C253	ELECTR.CAPACITOR	CEASR22M50
	C254	CERAMIC CAPACITOR (0.022/50V)	ACG1022
	C255	ELECTR.CAPACITOR	CEAS0R1M50
	C256	ELECTR.CAPACITOR	CEAS330M16
	C257,258	CERAMIC CAPACITOR	CKMYB152K50
	C259,260	ELECTR.CAPACITOR	CEAS2R2M50
	C261,262	CERAMIC CAPACITOR	CKCYB682K50
	C263	ELECTR.CAPACITOR	CEAS330M16
	C264−266	ELECTR.CAPACITOR	CEAS470M16
	C301,302	CERAMIC CAPACITOR	CKMYB391K50
	C303,304	ELECTR.CAPACITOR	CEAS2R2M50
	C305,306	CERAMIC CAPACITOR (100p/50V)	ACG1017
	C307,308	ELECTR.CAPACITOR	CEAS470M16
	C309,310	CERAMIC CAPACITOR	CKDYB222K50
	C311,312	CERAMIC CAPACITOR	CKCYB822K50
	C313,314	ELECTR.CAPACITOR	CEAS330M16
	C315,316	CERAMIC CAPACITOR (0.01/50V)	ACG1021
	C317,318	ELECTR.CAPACITOR	CEAS2R2M50
	C319,320	ELECTR.CAPACITOR	CEAS470M16
	C332	CERAMIC CAPACITOR	CKCYF473Z50
	C333−336	ELECTR.CAPACITOR	CEAS2R2M50
	C343,344	ELECTR.CAPACITOR	CEAS470M16
	C345,346	ELECTR.CAPACITOR	CEAS100M25
	C403,404	CERAMIC CAPACITOR	CKMYB221K50
	C405,406	CERAMIC CAPACITOR	CCDSL560K500
	C407,408	CERAMIC CAPACITOR	CCMSL100D50
	C411,412	ELECTR.CAPACITOR	CEAS330M16
	C413,414	MYLOR FILM CAPACITOR	CQMA682J50
	C415,416	ELECTR.CAPACITOR	CEAS470M16
	C417,418	CERAMIC CAPACITOR	CKCYX333M25
	C419,420	AUDIO FILM CAPACITOR	CFTXA103J50
	C421,422	AUDIO FILM CAPACITOR	CFTXA104J50
	C423−426	ELECTR.CAPACITOR	CEAS010M50
	C427,428	CERAMIC CAPACITOR	CCDSL271K500
	C429,430	CERAMIC CAPACITOR	CCDSL101K500
	C431	CQPA (2000P/630V)	ACE1020
	C432	CERAMIC CAPACITOR	CKDYB272K500
	C433	MYLOR FILM CAPACITOR	CQMA562K400
	C434	CERAMIC CAPACITOR	CKMYB681K50
	C435	MYLOR FILM CAPACITOR	CQMA123K250
	C436	CERAMIC CAPACITOR	CKMYB221K50

Mark	No.	Description	Parts No.
	C437	MYLOR FILM CAPACITOR	CQMA103K50
	C438	MYLOR FILM CAPACITOR	CQMA153K50
	C439	MYLOR FILM CAPACITOR	CQMA103K50
	C440	ELECTR.CAPACITOR	CEAS4R7M50
	C441,442	ELECTR.CAPACITOR	CEAS470M16
	C443	ELECTR.CAPACITOR	CEAS101M16
	C444	CERAMIC CAPACITOR	CKCYF473Z50
	C445,446	ELECTR.CAPACITOR	CEASR68M50
	C447−450	ELECTR.CAPACITOR	CEASS2R2M50
	C451,452	ELECTR.CAPACITOR	CEAS330M16
	C453,454	AUDIO FILM CAPACITOR	CFTXA330J50
	C455,456	MYLOR FILM CAPACITOR	CQMA562J50
	C457,458	MYLOR FILM CAPACITOR	CQMA133J50
	C459,460	MYLOR FILM CAPACITOR	CQMA163J50
	C461,462	ELECTR.CAPACITOR	CEAS330M16
	C463,464	AUDIO FILM CAPACITOR	CFTXA683J50
	C465,466	MYLOR FILM CAPACITOR	CQMA182J50
	C467,468	ELECTR.CAPACITOR	CEAS2R2M50
	C469,470	CERAMIC CAPACITOR	CKMYB681K50
	C471−474	ELECTR.CAPACITOR	CEAS2R2M50
	C475,476	ELECTR.CAPACITOR	CEAS220M16
	C477	CERAMIC CAPACITOR	CKCYF473Z50
	C478	ELECTR.CAPACITOR	CEAS470M16
	C479	ELECTR.CAPACITOR	CEAS010M50
	C481,482	CERAMIC CAPACITOR	CCMSL101J50
	C483,484	CERAMIC CAPACITOR	CKCYF103Z50

RESISTORS

Mark	No.	Description	Parts No.
	VR201	VR(4.7K)	ACP1024
	VR401,402	VR	VRTM6V104
	VR403,404	VR	VRTM6V203
	VR405,406	VR	VRTM6V204
	VR407,408	VR	VRTM6V203
	R263	CARBON FILM RESISTOR	RD1/4PM151J
⚠	R307,308	CARBON FILM RESISTOR	RD1/2PMFL100J
⚠	R347,348	CARBON FILM RESISTOR	RD1/2PMF220J
	R363	CARBON FILM RESISTOR	RD1/4PM182J
	R364	CARBON FILM RESISTOR	RD1/4PM122J
	R365	CARBON FILM RESISTOR	RD1/4PM471J
	R366	CARBON FILM RESISTOR	RD1/4PM271J
	R435	CARBON FILM RESISTOR	RD1/2PM180J
		Other resistors	RD1/8PM□□□J

OTHERS

Mark	No.	Description	Parts No.
		ANTENNA TERMINAL 4−P	AKA1009
		PHONO JACK 6−P	AKB1023
		JACK(PL +12V)	AKN−203
	T203	AM RF TUNING BLOCK	AXX1011
	CN1	JUMPER CONNECTOR 6−P	KPE6
	CN13	JUMPER CONNECTOR 15−P	KPE15
	CN14	JUMPER CONNECTOR 15−P	KPE15
	CN23	JUMPER CONNECTOR 11−P	KPE11
	X201	CERAMIC RESONATOR (450kHz)	ATF1027
	X202	CRYSTAL(7.200MHz) RESONATOR	ASS1005

VR ASSEMBLY

SEMICONDUCTORS

Mark	No.	Description	Parts No.
	IC305		TA7291S
	IC306,307	OP−AMP IC	NJM4558DXP

CAPACITORS

Mark	No.	Description	Parts No.
	C321,322	CERAMIC CAPACITOR	CCMSL330J50
	C323,324	ELECTR.CAPACITOR	CEAS221M10
	C325,326	CERAMIC CAPACITOR (47p/50V)	ACG1016
	C327,328	ELECTR.CAPACITOR	CEAS2R2M50
	C329,330	ELECTR.CAPACITOR	CEAS101M16
	C331	CERAMIC CAPACITOR	CKDYF473Z50
	C337,338	ELECTR.CAPACITOR	CEAS100M25
	C339,340	ELECTR.CAPACITOR	CEAS2R2M50
	C341,342	CERAMIC CAPACITOR (0.01/50V)	ACG1021
	C347,348	CERAMIC CAPACITOR (47p/50V)	ACG1016

RESISTORS

Mark	No.	Description	Parts No.
	VR301	VR(100k)	ACX1037
⚠	R351	CARBON FILM RESISTOR	RD1/2PMFL330J
		Other resistors	RD1/8PM□□□J

OTHER

Mark	No.	Description	Parts No.
	CN12	JUMPER CONNECTOR 3−P	KPE3

DECK CONTROL ASSEMBLY (AWZ2799)

SEMICONDUCTORS

Mark	No.	Description	Parts No.
	IC801		PDE029−C
	IC802	LOGIC IC	SN74LS42N
	Q801	TRANSISTOR	DTC143ES
	Q901,902	TRANSISTOR	RN2204
	Q903−906	TRANSISTOR	RN1201
	Q907−912	TRANSISTOR	2SA1515
	D801−814	DIODE	1SS252
	D815−821	ZENER DIODE	RD5.6ESB
	D901−906	DIODE	1SS252

COIL

Mark	No.	Description	Parts No.
	L801	AXIAL INDUCTOR	LAU220K

CAPACITORS

Mark	No.	Description	Parts No.
	C801−804	CERAMIC CAPACITOR	CKCYF473Z50
	C805	ELECTR.CAPACITOR	CEAS101M10
	C901	ELECTR.CAPACITOR	CEASR33M50
	C902	ELECTR.CAPACITOR	CEAS101M16

RESISTORS

Mark	No.	Description	Parts No.
	VR902	VR	VRTM6H103
	VR903,904	VR	VRTM6H203
		Other resistors	RD1/8PM□□□J

OTHERS

Mark	No.	Description	Parts No.
	CN21	JUMPER CONNECTOR 14−P	KPE14
	CN26	JUMPER CONNECTOR 7−P	KPE7
	CN29	JUMPER CONNECTOR 11−P	KPE11
	CN30	JUMPER CONNECTOR 14−P	KPE14
	X801	CERAMIC RESONATOR (4.19MHz)	ASS1018

DECK IND ASSEMBLY

SEMICONDUCTORS

Mark	No.	Description	Parts No.
	D851	LED(RED)	AEL1075
	D852−855	LED	AEL1077
	D856−858	DIODE	1SS252

SWITCHES

Mark	No.	Description	Parts No.
	S851−854	SWITCH (PAUSE,REC,HI−SPEED COPY,NORMAL COPY)	ASG1034
	S855,856	SWITCH (DOLBY,REVERSE MODE)	ASH1014

RESISTORS

Mark	No.	Description	Parts No.
		All resistors	RD1/8PM□□□J

DECK1 SW ASSEMBLY

SWITCHES

Mark	No.	Description	Parts No.
	S801−805	SWITCH (1 REW,1 REV,1 FF,1 FWD,1 STOP)	ASG−704

DECK2 SW ASSEMBLY

SWITCHES

Mark	No.	Description	Parts No.
	S806−810	SWITCH (2 REW,2 REV,2 FF,2 FWD,2 STOP)	ASG−704

LATCH ASSEMBLY (AWX1044)

SEMICONDUCTORS

Mark	No.	Description	Parts No.
	IC998	LOGIC IC	TC4011BP
	IC999	LOGIC IC	TC74HC75AP
	D999	DIODE	1SS252

RESISTORS

Mark	No.	Description	Parts No.
	R999	CARBON RESISTOR	RD1/8PM473J

OTHERS

Mark	No.	Description	Parts No.
	CN499	JUMPER CONNECTOR 3−P	KPE3

5. ADJUSTMENTS

5.1 TAPE DECK SECTION

5.1.1 Mechanical adjustment

- **Adjustment point are as shown in Fig. 5−1**

1. Connect the frequency counter to the TP901 terminal (Tape speed) on the DECK CTRL assembly.
2. Turn the Power switch on.
3. Mount the test tape STD−301 onto deck I.
4. Short circuit between terminals TP901 and TP902 on the DECK CTRL assembly and put the deck I into play mode. (STD−301 is play backed in double speed.)
5. Adjust with VR902 so that the playback signal freqency of deck I becomes 6020Hz ±20Hz.
6. Release the short circuit between terminals TP901 and TP902.
7. Put the deck I into play mode and adjust with VR903 so that the playback signal frequency becomes 3010Hz ±10Hz.
   (Note 1: Be sure not to turn VR902 while performing the normal speed adjustment.)
   (Note 2: Be sure to first perform double speed adjustment in both Decks I and II.)
8. At this point, be sure to confirm that wow and flutter are within 0.3% both in the double and normal speeds.
9. Mount the test tape STD−301 onto deck II.
10. Short circuit between terminals TP901 and TP902 on the DECK CTRL assembly A and put the deck II into play mode. (STD−301 is play backed in double speed.)
11. Adjust with VR902 so that the playback signal freqency of deck II becomes 6020Hz ±20Hz.
12. Release the short-circuit between terminals TP901 and TP902.
13. Put the deck II into play mode and adjust with VR904 so that the playback signal frequency of deck II becomes 3010Hz ±10Hz.
    (Note: Be sure not to turn VR902 while performing the normal speed adjustment.)
14. At this point, be sure to confirm that the wow and flutter within 0.3% both in the double and normal speeds.

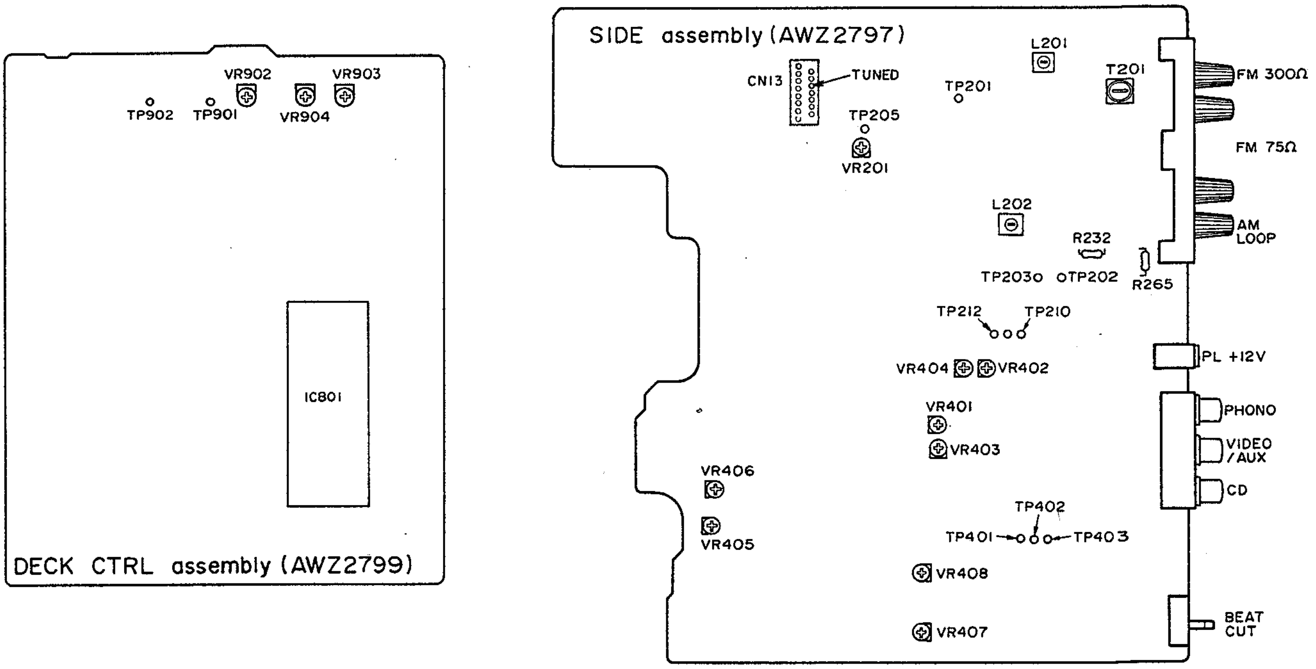

VR902
VR903
TP902
TP901
VR904
IC801
DECK CTRL assembly (AWZ2799)
SIDE assembly (AWZ2797)
CN13
TUNED
TP205
VR201
L201
TP201
T201
FM 300Ω
FM 75Ω
L202
R232
AM LOOP
TP203
TP202
R265
TP212
TP210
VR404
VR402
PL +12V
VR401
VR403
PHONO
VIDEO /AUX
CD
VR406
VR405
TP402
TP401
TP403
VR408
VR407
BEAT CUT

Fig. 5−1 Adjustments point

5.1.2 Electrical adjustment

Adjustment Conditions

1. The mechanical adjustments must be completed first.
2. The head must be cleaned and demagntetized.
3. Turn power on allow the deck to warm up for at least a few minutes before commencing any electrical adjustments.
4. The reference signal is 0dBv=1Vrms.
5. Connect a 50 kilo-ohm (or between 47 to 52 kilo-ohm) load resistance to the OUTPUT terminals.
6. Unless otherwize specified, the switches listed below are left in the positions indicated.
   DOLBY NR :OFF
   TAPE SELECTOR :NORM

List of Adjustmentms

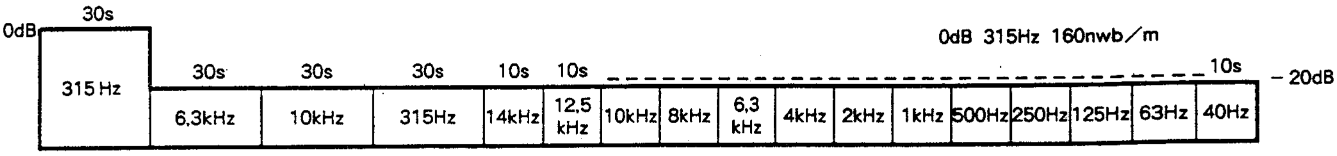
PLAYBACK SECTION
1. Head azimuth adjustment.
2. Playback level adjustment.

RECORDING SECTION
1. Recording bias adjustment.
2. Recording level adjustment.

NOTE: This unit has an automatic tape selection feature.

Test Tapes

STD−331B	:Playback adjustments (See Fig. 5−2)
STD−608A	:NORMAL blank tape
STD−620	:CrO$_2$ blank tape
STD−610	:METAL blank tape



0dB
30s
315 Hz
0dB 315Hz 160nwb/m
30s
30s
30s
10s
10s
10s
−20dB
6.3kHz
10kHz
315Hz
14kHz
12.5 kHz
10kHz
8kHz
6.3 kHz
4kHz
2kHz
1kHz
500Hz
250Hz
125Hz
63Hz
40Hz

Fig. 5−2 Constants of the test tape STD−331B

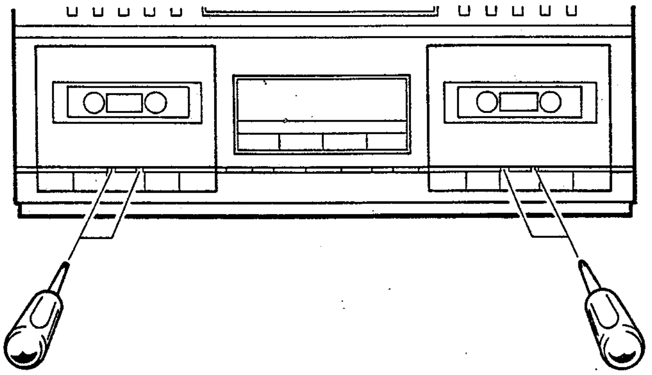
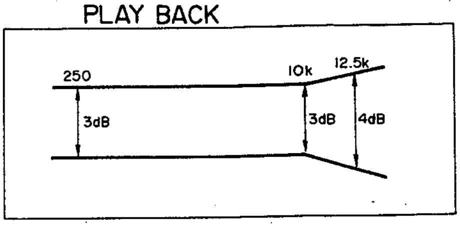


Fig. 5−3 Head azimuth adjustment

PLAY BACK



RECORDING

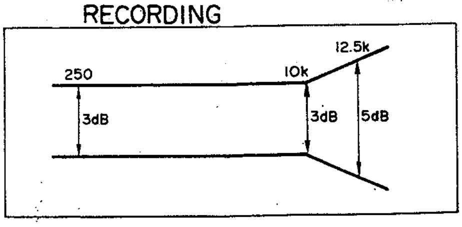


Fig. 5−4 Frequency response

DECK (PLAYBACK SECTION)

1. Head Azimuth Adjustment

- Turn VR403 and 404, (Deck Ⅰ) or VR401 and 402, (Deck Ⅱ) to mechanical center positions.

NO	Mode	Input signal & test tape	Adjustment location	Measuring location	Adjustment value	Remarks
1.	PLAY	Play the 10kHz/−20dB section of STD-331B test tape.	Head azimuth adjustment screw. (See Fig. 5-3)	TP401 (L) TP403 (R)	Maximum playback signal level.	
2.	STOP	Lock the screw with scrwe lock after completing adjustment.				

2. Playback level Adjustment

- This adjustment determines the DOLBY NR level, and must be performed with great care.

NO	Mode	Input signal & test tape	Adjustment location		Measuring location	Adjustment value	Remarks
1.	PLAY	Play the 315Hz/0dB section of the STD-331B test tape.	Deck Ⅰ	VR403 (Lch) VR404 (Rch)	TP401 (Lch) TP403 (Rch)	−5.2 dBv ±0.5 dBv	Adjust the playback level first at DECK Ⅰ, and then at DECK Ⅱ.
			Deck Ⅱ	VR401 (Lch) VR402 (Rch)			

DECK (RECORDING SECTION)

1. Recording Bias Adjustment

- After the adjustment, caution should be exercised so as not to become under bias by checking the distortion rate.

NO	Mode	Input signal & test tape	Adjustment location		Measuring location	Adjustment value	Remarks
1.	STOP	Set the TAPE SELECTOR switch to the NORM position.					
2.	REC	STD-630 (NORM) −20dB	Deck Ⅱ	VR405 (Lch) VR406 (Rch)	LINE OUT	0dB ±0.5dB (10kHz/315Hz)	

2. Recording Level Adjustment

NO	Mode	Input signal & test tape	Adjustment location		Measuring location	Adjustment value	Remarks
1.	STOP	Set the TAPE SELECTOR switch to the NORM position.					
2.	REC PAUSE	Apply a 315Hz/0dBv signal to the Line Input terminals.	Rec Level contorol		TP401 (Lch) TP403 (Rch)	−5.2 dBv	
3.		Set the DOLBY NR swtich to the ON position. (DOLBY B)					
4.	REC/PLAY	Record the above signal onto the STD-630 test tape, and playback.	Deck Ⅱ	VR407 (Lch) VR408 (Lch)	TP401 (Lch) TP403 (Rch)	−5.2dBv ±0.5dB	
5.	STOP	Set the TAPE SELECTOR switch to the CrO$_2$ position.					
6.	REC/PLAY	Record the above signal onto the STD-620 test tape, and playback.	Confirm		TP401 (Lch) TP403 (Rch)	−4.5dBV ±2dB	
7.	STOP	Set the TAPE SELECTOR switch to the METAL position.					

5.2 TUNER SECTION

5.2.1 FM (MONO) Tuner adjustment

- Adjustment point are as shown in Fig. 5−1.
- Make the wire connections as shown in Fig. 5−5.
- Set the function to FM (MONO)

FM MONO

Item	Adjustment location	Measuring location	Adjustment value	Conditions
Sensitivity adjustment	T201	TP210 TP212	Maximam voltage	Level at which the standard modulation of 98MHz does not saturats voltage of TP204
Tuning voltage check at 87.5 MHz	——	TP201	3.5V ±1.5V	——
Tuning voltage check at 108 MHz	——	TP201	$8.7V \, {}^{+1.3V}_{-2V}$	Adjust the L201,if out of specification
T METER adjustment	L202	TP202 TP203	Voltage difference 0V±10mV	Standard modulation at 98MHz 60dBμV
TUNED IND lighting level adjustment	R265	※CN "TUNED"		Separate R265,if ouf of specification at standard modulation at 98MHz 60dB

※ 10kΩ are applied to the "TUNED" terminal (+B = 5V). TUNED IND lights up at "L" level.

5.2.2 FM (STEREO) Tuner adjustment

- Adjustment point are as shown in Fig. 5−1.
- Make the wire connections as shown in Fig. 5−5.
- Set the function to FM (STEREO)

Playback Section

FM STEREO

Item	Adjustment location	Measuring location	Adjustment value	Conditions
MPX VCO Adjustment	VR201	TP205	76kHz ±100Hz	Non modulation at 98MHz 80dBμV
Confirmation of distortion factor check	———	TP210, TP212	1.5% or less	Stereo modulation at 98MHz 60dBμV
Distortion factor adjustment	T202	TP210, TP212	Minimam distortion	Stereo modulation at 98MHz 60dBμV

※ Perform the above adjustment only when the distortion factor check exceeds 1.5%.

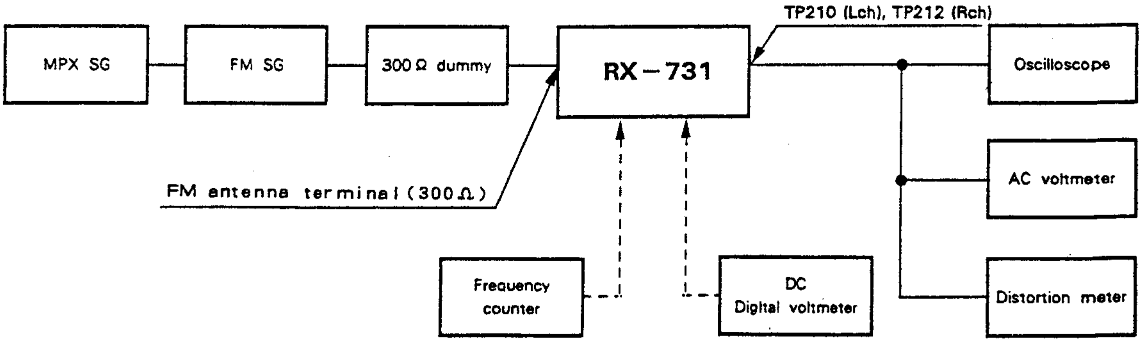

TP210 (Lch), TP212 (Rch)
MPX SG
FM SG
300 Ω dummy
RX-731
Oscilloscope
AC voltmeter
FM antenna terminal (300 Ω)
Frequency counter
DC Digital voltmeter
Distortion meter

Fig. 5-5 FM adjustment wiring diagram

5.2.3 AM Tuner adjustment

- Adjustment point are as shown in Fig. 5-1.
- Make the wire connections as shown in Fig. 5-6.
- Set the function to AM

AM

Item	Adjustment location	Measuring location	Adjustment valuen	Conditions
TUNED IND lighting level adjustment	R232	※ CN "TUNED"	60dBμV/m or less	Standard modulation at 1000 kHz.

※10kΩ are applied to the "TUNED" terminal (+B = 5V).
TUNED IND lights up at "L" level.

NOTE: Separate the R232 if out of specification.

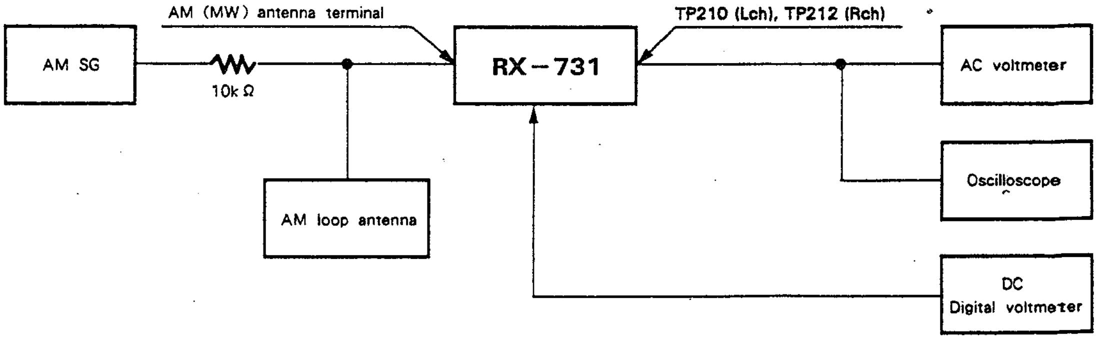

AM (MW) antenna terminal
TP210 (Lch), TP212 (Rch)
AM SG
10k Ω
RX-731
AC voltmeter
Oscilloscope
AM loop antenna
DC Digital voltmeter

Fig. 5-6 AM adjustment wiring diagram

6. IC INFORMATION

SYSTEM CONTROL MICRO COMPUTER (PD4269)

•Terminal function

No.	Terminal Name	I/O	Function	Active
1	Sr	DP	Segment r	–
2	Sn	DP	Segment n	–
3	Ss	DP	Segment s	–
4	St	DP	Segment t	–
5	AC50/60	I	AC pulse input	–
6	SCK	I	Serial clock input	
7	SO	O	Serial data output	–
8	SI	I	Serial data input	–
9	RMT	I	SR signal input	–
10	STEREO	I	STEREO signal input	L: STEREO
11	(SIGNAL)	I	Not used	–
12	9k/10k	I	9k/10k Switching input	H: 9k
13	MUTE	O	MUTE output	H: ON
14	PLL CLK	O	PLL CLOCK output	
15	PLL DATA	O	PLL DATA output	
16	PLL STB	O	PLL STROBE output	H
17	MONO	O	MONO signal output	H: MONO
18	(SILENT)	O	Not used	–
19	TUNE	I	Tuning meter input	L: INPUT
20	$\overline{\text{CD PLAY}}$	I	CD PLAY signal input	L: CD PLAY
21	KEY OUT 1	O	Key matrix output 1	
22	KEY OUT 2	O	Key matrix output 2	
23	KEY OUT 3	O	Key matrix output 3	

No.	Terminal Name	I/O	Function	Active
24	KEY OUT 4	O	Key matrix output 4	
25	KEY OUT 5	O	Key matrix output 5	
26	KEY OUT 6	O	Key matrix output 6	
27	KEY OUT 7	O	Key matrix output 7	
28	REM INH	O	Remote control inhibit output	
29	SR OUT	O	SR signal output	
30	X1	–	Connected to the 4.19MHz ceramic resonator.	
31	X2	–	Connected to the 4.19MHz ceramic resonator.	
32	Vss	–	GND	
33	XT1	–	GND	
34	N.C.	–	Not used	
35	KEY IN 1	I	Key matrix input 1	
36	KEY IN 2	I	Key matrix input 2	
37	KEY IN 3	I	Key matrix input 3	
38	KEY IN 4	I	Key matrix input 4	
39	$\overline{\text{RESET}}$	I	Reset input	
40	6G	DP	Grid 6	
41	7G	DP	Grid 7	
42	8G	DP	Grid 8	
43	9G	DP	Grid 9	
44	10G	DP	Grid 10	
45	5G	DP	Grid 5	
46	4G	DP	Grid 4	
47	3G	DP	Grid 3	
48	2G	DP	Grid 2	

No.	Terminal Name	I/O	Function	Active
49	1G	DP	Grid 1	
50	Sa	DP	Segment a	
51	Sb	DP	Segment b	
52	Sc	DP	Segment c	
53	Sd	DP	Segment d	
54	Se	DP	Segment e	
55	Sf	DP	Segment f	
56	−27V	−	FL controller/driver power supply for pull−down resistor	
57	−4.1V	−	FL controller/driver power supply	
58	Sg	DP	Segment g	
59	Sm	DP	Segment m	
60	Sj	DP	Segment j	
61	Sp	DP	Segment p	
62	Sh	DP	Segment h	
63	Sk	DP	Segment k	
64	Vdd	−	+5V	

I : CMOS input
O : CMOS output
UN : Nch open drain output with pull−up resistor
DP : Pch open drain output with pull−down resistor

7. FOR RX−731S/KU TYPE

NOTES:

- *Parts without part number cannot be supplied.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *Parts marked by "◉" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.*

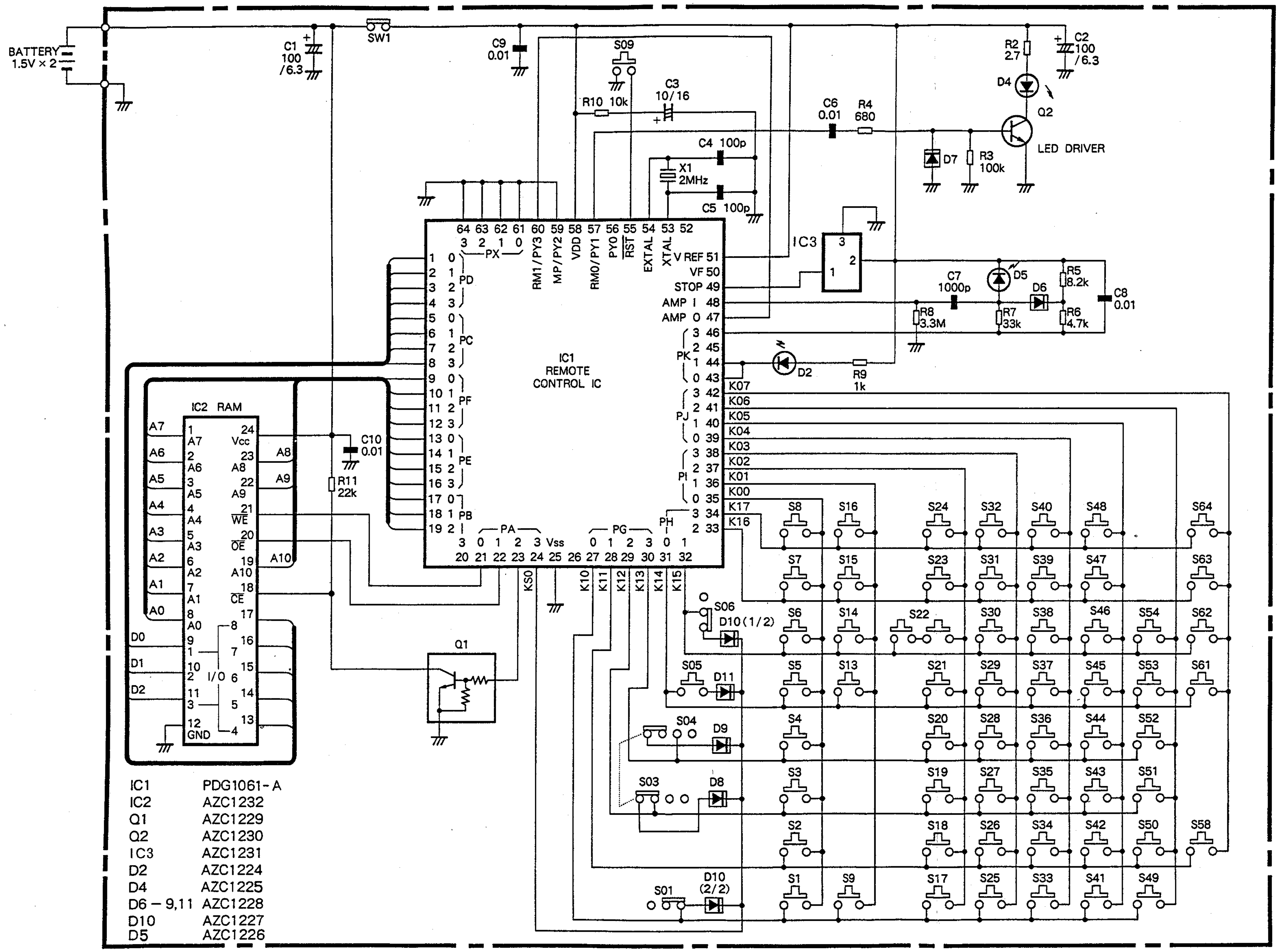
7.1 CONTRAST OF MISCELLANEOUS PARTS

The RX−731S/KU type is the same as the RX−731/KU type with the exception of the following sections.

Mark	Symbol & Description	Part No.		Remarks
		RX−731/KU type	RX−731S/KU type	
	Packing case	AHD1839	AHD1904	
	Operating instructions (English)	....	ARD1013	
	Remote control unit	AXD1141	AXD1143	
	Battery cover	AZN1846	....	

7.2 REMOTE CONTROL UNIT (AXD1143)

7.2.1 Schematic diagram


BATTERY 1.5V × 2
C1 100 /6.3
SW1
C9 0.01
S09
R10 10k
C3 10/16
C4 100p
X1 2MHz
C5 100p
C6 0.01
R4 680
R2 2.7
C2 100 /6.3
D4
Q2
LED DRIVER
D7
R3 100k
IC3
C7 1000p
D5
D6
R5 8.2k
C8 0.01
R8 3.3M
R7 33k
R6 4.7k
D2
R9 1k
IC1 REMOTE CONTROL IC
PX PD PC PF PE PB PA PG PK PJ PI PH
RM1/PY3 MP/PY2 VDD RM0/PY1 PY0 RST EXTAL XTAL
V REF VF STOP AMP I AMP O Vss
K07 K06 K05 K04 K03 K02 K01 K00 K17 K16
KS0 K10 K11 K12 K13 K14 K15
IC2 RAM
A7 A6 A5 A4 A3 A2 A1 A0 D0 D1 D2 A8 A9 A10
Vcc A8 A9 WE OE A10 CE I/O GND
C10 0.01
R11 22k
Q1
S06 D10(1/2)
S05 D11
S04 D9
S03 D8
S01 D10 (2/2)
S1 S2 S3 S4 S5 S6 S7 S8 S9 S13 S14 S15 S16 S17 S18 S19 S20 S21 S22 S23 S24 S25 S26 S27 S28 S29 S30 S31 S32 S33 S34 S35 S36 S37 S38 S39 S40 S41 S42 S43 S44 S45 S46 S47 S48 S49 S50 S51 S52 S53 S54 S58 S61 S62 S63 S64

IC1	PDG1061-A
IC2	AZC1232
Q1	AZC1229
Q2	AZC1230
IC3	AZC1231
D2	AZC1224
D4	AZC1225
D6 – 9,11	AZC1228
D10	AZC1227
D5	AZC1226

1. RESISTORS :
   Indicated in Ω, 1/4W, 1/6W and 1/8W, ± 5 % tolerance unless otherwise noted k ; kΩ, M ; MΩ, (F) ; ± 1 %, (G) ; ± 2 %, (K) ; ± 10 %, (M) ; ± 20 % tolerance.
2. CAPACITORS :
   Indicated in capacity (μ F) /voltage (V) unless otherwise noted p ; pF. Indication without voltage is 50V except electrolytic capacitor.
3. OTHERS :
   ➡ ; Signal route.
   ⊘ ; Adjusting point.
   The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
   ※ marked capacitors and resistors have parts numbers.

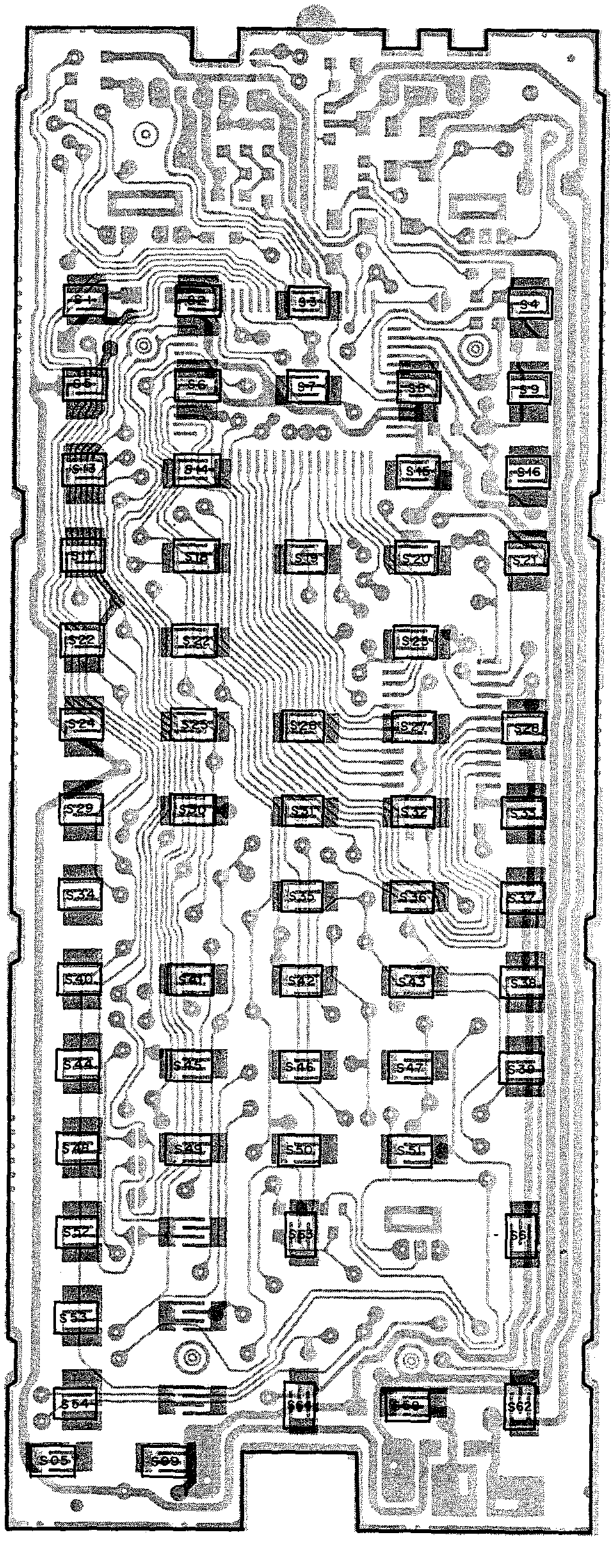
   This is the basic schematic diagram, but the actual circuit may vary due to improvements in design.
4. SWITCHES : (The underlined indicates the switch position)
   SW1 : REMOTE POWER
   S01 : AUDIO/VIDEO

	SR RECALL	USE	LEARN
S03	ON	OFF	OFF
S04	OFF	OFF	ON

S05 : M – CLR
S06 : SUR/AMP
S09 : RESET

S1 : AMP
S2 : TV POWER
S3 : VCR
S4 : SLEEP AMP/TV
S5 : V/AUX
S6 : TAPE
S7 : TUNER/VCR1
S8 : PHONO/VCR2
S9 : CD/VDP
S13 : PGM
S14 : DISC/DISPLAY
S15 : |◀◀/CHP/FR – TM
S16 : ▶▶| SEARC
S17 : ◀◀ CD/VDP
S18 : ❚❚
S19 : ■
S20 : ▶
S21 : ▶▶
S22 : ● (REC)
S23 : ❚❚
S24 : ◀◀
S25 : ◀/TV/VCR TAPE (DECK II) /VCR
S26 : ■
S27 : ▶
S28 : ▶▶
S29 : ◀◀/TV
S30 : ◀/VDP
S31 : ■/VCR TAPE (DECK I) /VCR
S32 : ▶/CH –
S33 : ▶▶/CH +
S34 : CD + 10
S35 : 1 – 12/13 – 24/TV ANT
S36 : BAND/CICLE
S37 : TV DISPLAY
S38 : CHANNEL +
S39 : CHANNEL –
S40 : 1/13
S41 : 2/14
S42 : 3/15
S43 : 4/16
S44 : 5/17
S45 : 6/18
S46 : 7/19
S47 : 8/20
S48 : 9/21
S49 : 0/10/22
S50 : 11/23/MEMORY
S51 : 12/24/CLEAR
S52 : TV FUNCTION
S53 : TV VOL +
S54 : TV VOL –
S55 : AUDIO SOURCE
S56 : VIDEO FUNCTION
S57 : SURROUND MODE
S58 : MUTING
S61 : MASTER VOLUME +
S62 : MASTER VOLUME –
S63 : SUR MODE
S64 : DELAY

7.2.2 P.C.board pattern


S1
S2
S3
S4
S5
S6
S7
S8
S9
S14
S15
S16
S17
S18
S19
S20
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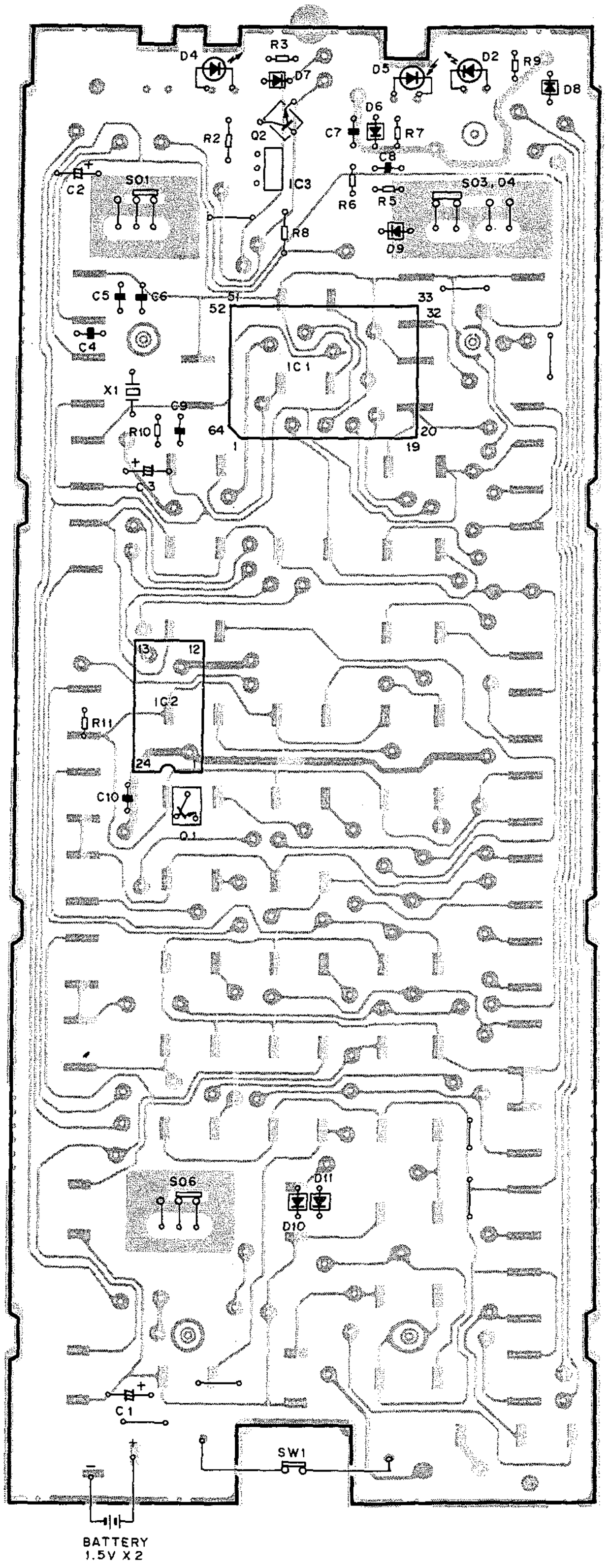
S39
S48
S49
S50
S51
S52
S61
S53
S54
S60
S62
S05

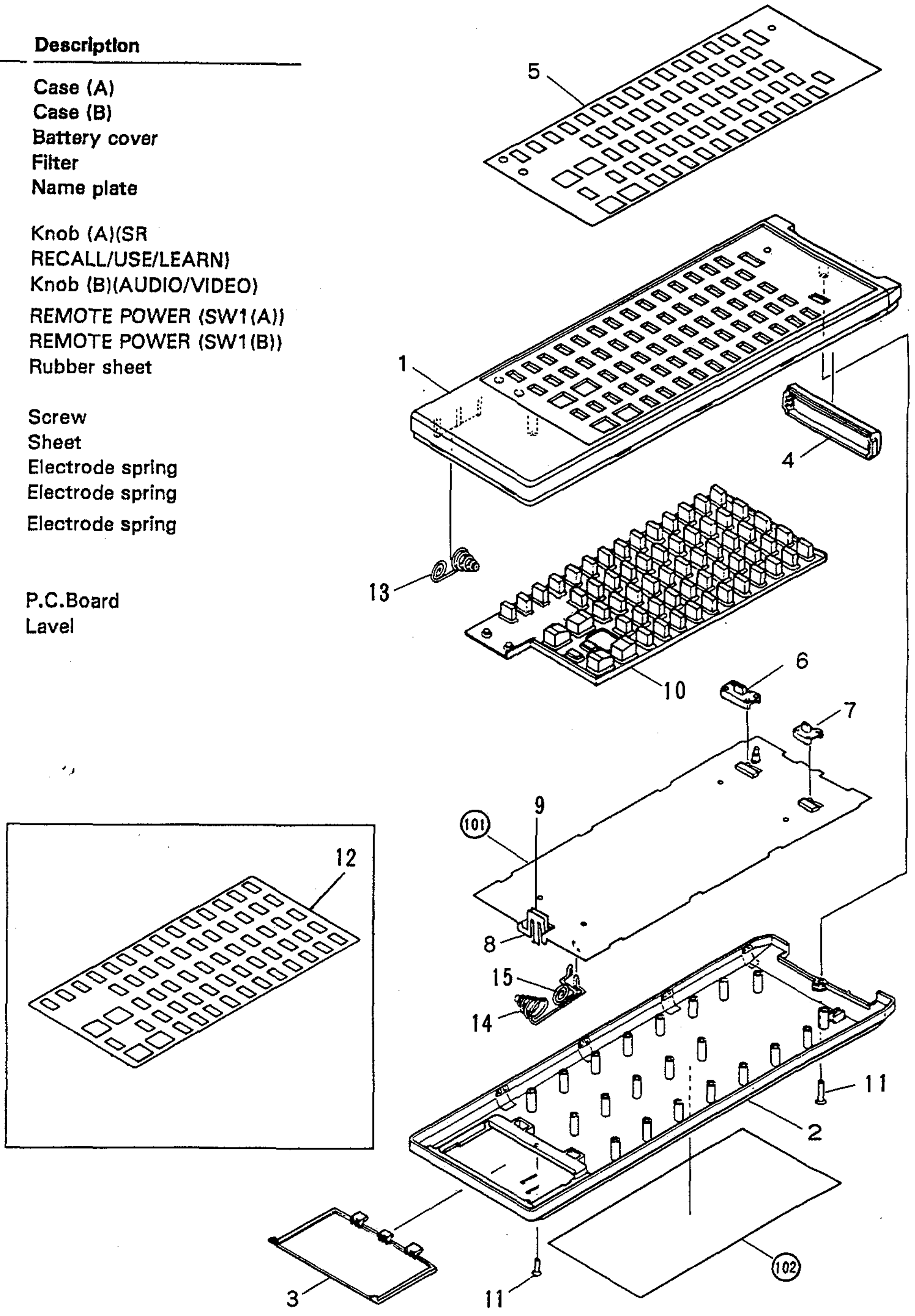

D4
R3
D7
D5
D2
R9
D8
R2
Q2
D6
C7
R7
C8
IC3
C2
S01
R6
R5
S03, 04
R8
D9
C5
C6
51
52
33
32
C4
IC1
X1
C9
R10
64
1
20
19
C3
13
12
IC2
R11
24
C10
Q1
S06
D11
D10
C1
SW1
BATTERY
1.5V X 2

7.2.3 Exploded views and parts list

NOTES:
- *Parts without part number cannot be supplied.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *Parts marked by "◉" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.*

Parts List of Exterior

Mark	No.	Parts No.	Description
	1	AZA1968	Case (A)
	2	AZA1969	Case (B)
	3	AZA1970	Battery cover
	4	AZA1139	Filter
	5	AZA1242	Name plate
	6	AZA1142	Knob (A)(SR RECALL/USE/LEARN)
	7	AZA1143	Knob (B)(AUDIO/VIDEO)
	8	AZA1144	REMOTE POWER (SW1(A))
	9	AZA1177	REMOTE POWER (SW1(B))
	10	AZA1243	Rubber sheet
	11	AZA1146	Screw
	12	AZA1152	Sheet
	13	AZB1268	Electrode spring
	14	AZB1269	Electrode spring
	15	AZB1270	Electrode spring
	101		P.C.Board
	102		Lavel



7.2.4 Electrical parts list

NOTES:

- *Parts without part number cannot be supplied.*
- *Parts marked by "◉" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *When ordering resistors, first convert resistance values into code form as shown in the following examples.*
  Ex. 1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47k ohm (tolerance is shown by J = 5%, and K = 10%).
  560Ω 56 × 10¹ 561..........................RD1/4PS $\boxed{5}\ \boxed{6}\ \boxed{1}$ *J*
  47kΩ 47 × 10³ 473..........................RD1/4PS $\boxed{4}\ \boxed{7}\ \boxed{3}$ *J*
  0.5Ω 0R5..RN2H $\boxed{0}\ \boxed{R}\ \boxed{5}$ *K*
  1Ω 010..RS1P $\boxed{0}\ \boxed{1}\ \boxed{0}$ *K*

  Ex. 2 When there are 3 effective digits (such as in high precision metal film resistors).
  5.62kΩ 562 × 10¹ 5621........................RN1/4SR $\boxed{5}\ \boxed{6}\ \boxed{2}\ \boxed{1}$ *F*

SEMICONDUCTORS

Mark	Symbol & Description	Part No.
	IC1	PDG061−A
	IC2	AZC1232
	IC3	AZC1231
	Q1	AZC1229
	Q2	AZC1230
	D2	AZC1224
	D4	AZC1225
	D5	AZC1226
	D6−D9,D11	AZC1228
	D10	AZC1227

SWITCHES

Mark	Symbol & Description	Part No.
	S01,S06 Slide switch (AUDIO/VIDEO,SUR/AMP)	AZS1073
	S03,S04 Slide switch (SR RECALL/USE/LEARN)	AZS1074
	SW1 (A) REMOTE POWER	AZA1144
	SW1 (B) REMOTE POWER	AZS1177

CAPACITORS

Mark	Symbol & Description	Part No.
	C1,C2 (100μF/6V)	AZC1253
	C3 (10μF/16V)	AZC1254
	C4,C5 (100pF)	AZC1222
	C6,C8−C10 (0.01μF)	AZC1220
	C7 (1000pF)	AZC1221

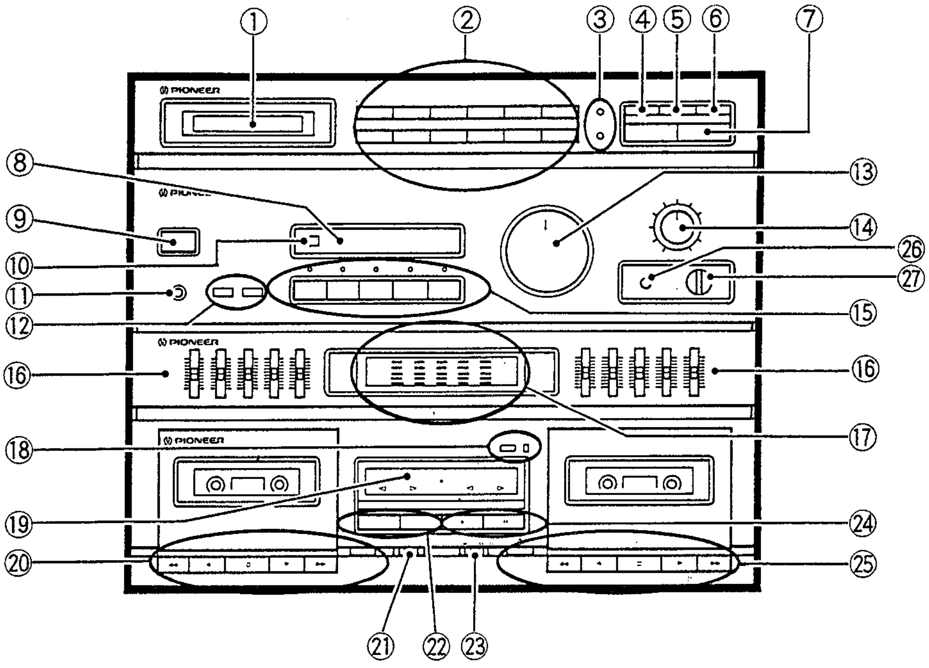
RESISTORS

Mark	Symbol & Description	Part No.
	R2 (2.7Ω)	AZC1219
	R3 (100kΩ)	AZC1210
	R4 (680Ω)	AZC1217
	R5 (8.2kΩ)	AZC1214
	R6 (4.7kΩ)	AZC1215
	R7 (33kΩ)	AZC1211
	R8 (3.3MΩ)	AZC1218
	R9 (1kΩ)	AZC1216
	R10 (10kΩ)	AZC1213
	R11 (22kΩ)	AZC1212

OTHER

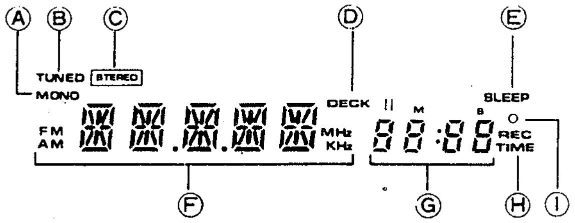
Mark	Symbol & Description	Part No.
	X1 Ceramic resonator (2.0MHz)	AZC1223

8. PANEL FACILITIES



TUNER SECTION

① Display section



Ⓐ MONO indicator
Lights when the FM MONO switch is set to ON. When this indicator is lit, FM stereo broadcasts are reproduced monaurally.

Ⓑ TUNED indicator
Lights when a broadcast is received and turned in well.

Ⓒ STEREO indicator
Lights when an FM stereo broadcast is received (FM MONO switch is set to OFF).

Ⓓ DECK II indicator
Lights when deck II is recording.

Ⓔ SLEEP indicator
Indicates that the sleep timer is activated.

Ⓕ Frequency display
Shows received broadcast frequency. Also gives scrolling display of main function status.
FM and MHz light: FM reception.
AM and kHz light: AM reception.
Messages will be displayed when setting time and when turning the power ON/OFF.

Ⓖ Time display
This shows the present time and during recording on deck II, it shows the elapsed recording time.

Ⓗ DECK II REC TIME indicator
Lights when deck II is recording.

Ⓘ Remote control indicator
Flashes when a command is being received from the remote control unit.

② STATION CALL switches

These are used to recall preset broadcasting stations and to preset the station.

③ Time switches

Used for starting the clock adjustment.

④ FM MONO switch

Normally, the MONO indicator remains off. However, it may not be possible to tune in a desired FM station because it is too far away or because its signals are too weak. In cases like these, press the switch to set the reception to the monaural mode (MONO indicator lights) and tune in the station. The program of an FM stereo broadcast will be heard in mono. This switch will not function for AM reception. The FM MONO setting is memorized along with station frequency when presetting a station.

⑤ MEMORY switch

This switch is used to memorize stations. When the switch is pressed, the frequency display will flash. To memorize the frequency of any station, press one of the STATION CALL switch while the frequency indicator is flashing.

⑥ BAND selector switch (FM/ AM)

This is used to select the band of the desired station. The bands change alternately each time the switch is pressed.

→ FM reception
AM reception ←

⑦ −, + switches

[During tuning]
These are used for locating stations.
Used "−" switch for lower, and "+" switch for higher frequencies.

[During time setting]
Used for adjusting the clock.

AMPLIFIER SECTION

⑧ MULTI-ROOM REMOTE indicator

Blinks when receiving signals from the Multi-room remote control unit.

⑨ POWER STANDBY/ON switch

ON: When set to the ON position, power is supplied and the unit becomes operational.

STANDBY: When set to the STANDBY position, the main power flow is cut and the unit is no longer fully operational. A minute flow of power feeds the unit to maintain operation readiness.
(The tuner section display shows only the time.)

Disconnect the power cord from the power outlet when you do not plan to use the cassette tape deck receiver for a long period of time.

> *The cassette tape deck receiver has a backup function, so it will return to the original status when the power cord is unplugged and soon again plugged into the power outlet.*

⑩ REMOTE SENSOR window

⑪ PHONES jack

This is a "standard plug-type jack" for headphones.

⑫ SPEAKERS A/B switches ON ▂ /OFF ■

[ON]: Depressed position: Sound is heard from the speaker systems.

[OFF] Released position: No sound is heard from the speaker systems.

NOTE:
When the speaker system is connected to only one speaker terminal (A or B) and both A and B selector switches are ON, there will be no sound.
Turn ON only the selector to which the speaker system is connected.

⑬ VOLUME control/indicator

The volume is increased when this control is turned clockwise, decreased when turned counterclockwise. When operating with the remote control unit, the control automatically turns clockwise when "+" is pressed, counterclockwise when "-" is pressed.

⑭ BALANCE control

Usually set this control to the central position. If turned counterclockwise, the volume of the right channel will decrease. If turned clockwise, the volume of the left channel will decrease.

⑮ FUNCTION switches/indicators

The indicators light for the specified functions.

GRAPHIC EQUALIZER SECTION

⑯ GRAPHIC EQUALIZER controls

⑰ SPECTRUM ANALYZER display

CASSETTE DECK SECTION

- The cassette deck receiver is provided with an automatic tape selector function.
  Deck I ..... NORMAL/CrO_2/METAL
  Deck II ..... NORMAL/CrO_2

⑱ DECK II COUNTER and reset switch

3-digit display measures tape travel on deck II.

⑲ Indicators

Direction (◁, ▷): Show direction of tape travel.
Blinks during DECK II PAUSE mode.

REC (or ○): Lights when recording. Flashes when copying a tape.
Slow flashing = Normal copy
Rapid flashing = High speed copy

⑳ Deck I Operation switches

▲ EJECT ········	Ejection
►(PLAY: FWD) ···	For playing back a tape in the forward mode. The FUNCTION selector swithces to TAPE. (AUTO FUNCTION)
◄(PLAY: REV) ···	For playing back a tape in the reverse mode. The FUNCTION selector swithces to TAPE. (AUTO FUNCTION)
■(STOP) ············	For stopping the tape.
►►(FAST) ········	Fast forward in forward mode, rewind in reverse mode.
◄◄(FAST) ········	Rewind in forward mode, fast forward in reverse mode.

㉑ DOLBY* NR switch

Set to activate noise reduction system. Use to play back tapes recorded using Dolby B NR.

- Tapes recorded using Dolby B NR should always be played back with the noise reduction system on. Sound quality will be adversely affected if they are played back with the system off, or if tapes recorded using a different noise reduction system are played back with the Dolby B NR system on.
- It is recommended that tapes recorded using Dolby B NR be so marked on the label. This will help to prevent incorrect setting of the noise reduction switch during playback.

*

Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.
"Dolby" and the double-D symbol DD are trademarks of Dolby Laboratories Licensing Corporation.

㉒ COPY MODE switches

These switches are used to select the copy mode.

HIGH	High speed copying (double-speed, halftime copying)
NORMAL	Normal speed copying

㉓ REV (REVERSE) MODE switch

Switch position	During playback	During recording
RELAY PLAY REC ⇄	Plays both tape sides. When one deck finishes playback, the other deck begins playback of both tape sides for 6 times. If there is a tape in only one deck, then that deck continuously plays both sides of the tape for 6 times.	Records on one side (Deck II only).
REC ⊃ PLAY ⊂⊃	Plays both tape sides for 6 times.	Records on side (Deck II only).

㉔ DECK II switches

REC (●) ···········	To set to recording standby mode. Recording begins when you press the PLAY switch (◄ or ►).
PAUSE (▮▮) ········	Temporarily stops tape travel. Cancels pause mode when pressed again or press the PLAY switch.

㉕ DECK II Operation switches:

Same as Deck I operation switches ⑲.

㉖ MIC jack (Multi-voltage model only)

㉗ MIC MIXING level control (Multi-voltage model only)

REMOTE CONTROL UNIT FACILITIES

Range of remote control

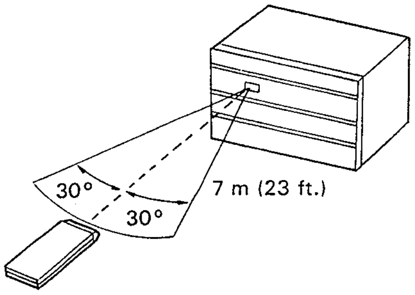
When the remote control unit is pointed at the REMOTE SENSOR window on the deck receiver and any of its keys is pressed, the cassette deck receiver and other components can be operated by remote control.

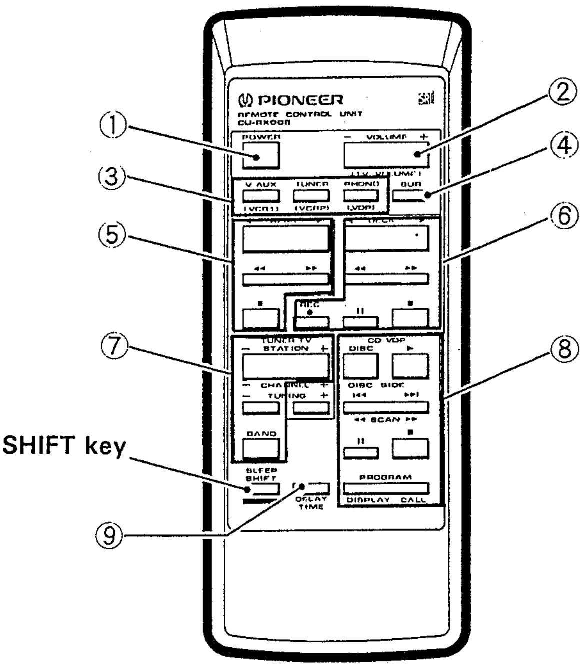
Distance: Within a range of about 7 meters from the REMOTE SENSOR window.

Angle: Within approx. 30 degrees from the center of the REMOTE SENSOR window.

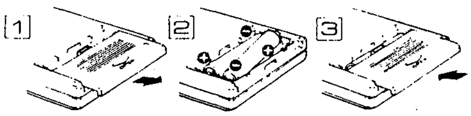
Remote control will not be possible if there is an obstacle between the remote control unit and the REMOTE SENSOR window.

Performance of the remote control unit is adversely affected in the presence of strong fluorescent light. Keep such lights away, specially from the sensor window.





PUTTING BATTERIES INTO THE REMOTE CONTROL UNIT



[1] Remove the cover of the battery compartment on the rear side of the remote control unit.

[2] Take out the two size "AAA" [IEC R03 (UM-4)] dry cell batteries supplied and load them into the battery compartment, correctly matching the plus (+) and minus (−) as indicated inside the compartment.

[3] Replace the cover of the battery compartment.

Cautions for handling dry cell batteries.

Misusing dry cell batteries can result in electrolyte leakage or explosions, Bear in mind the following points for getting the most out of your batteries.

- When loading the batteries into the battery compartment, make sure the plus (+) and minus (−) polarities correspond to the markings on the compartment.
- Even though they may be the same shape, batteries come with different voltage ratings. Do not use different types of batteries together. Use only the same kind of batteries.
- Do not mix up new batteries and used batteries but replace all the batteries at the same time.

NOTE:
RX-731S is provided with Programmable Remote Control Unit. For operation of the Programmable Remote Control Unit refer to the seperate Operating Instructions.

① POWER key

② VOLUME key: - (down), + (up)

Increases/decreases the sound volume of the unit.
[When used with the SHIFT key]
Increases/decreases the sound volume of TV set.

③ FUNCTION selector keys

For selecting V/AUX (VIDEO/AUX), TUNER or PHONO.
[When used with the SHIFT key]
Can be used to select VCR1, VCR2 or VDP functions.

NOTE:
This function can be used with Pioneer products with [SR] mark which are provided with the input selector for VCR1, VCR2 and VDP. with a system where the optional AV surround processor VSP-333 is installed, its video input selector can be used.

Precautions on using the system in combination with VSP-333.

- When selecting V/AUX, the mode of the input selector of VSP-333 does not change to AUDIO. Set to AUDIO by using the INPUT SELECTOR of VSP-333.
- When VCR1, VCR2 or VDP is selected, the mode of the FUNCTION selector of this unit changes to VIDEO/AUX.

④ SUR (surround) key

For selecting surround mode.

⑤ DECK I operation keys

► ······················ Forward playback (AUTO FUNCTION)
◄ ······················ Reverse playback (AUTO FUNCTION)
◄◄ ···················· Fast (reverse)
►► ···················· Fast (forward)
■ ······················ Stop

⑥ DECK II operation keys

► ······················ Forward playback (AUTO FUNCTION)
◄ ······················ Reverse playback (AUTO FUNCTION)
►► ···················· Fast (forward)
◄◄ ···················· Fast (reverse)
■ ······················ Stop
● REC ················ Recording standby
❚❚ ······················ Pause

⑦ TUNER/TV keys

STATION:

- Before operation, memorize broadcast stations in the STATION CALL switches.

+ ·················· Station change in order in the upward direction

– ················ Station change in order in the downward direction

TUNING: Same as main unit TUNING switch.

BAND: Same as main unit BAND switch.

[When used with the SHIFT key]

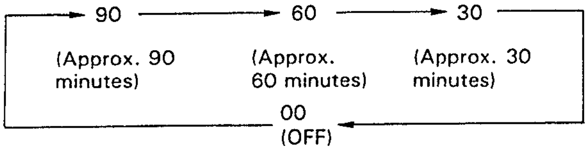
CHANNEL:

Increases/decreases (+/–) the channel number of TV.

SLEEP:

Sets the sleep timer. Each time you press this key, the setting changes as shown here. The current setting is shown on the tuner display.

Power turns off when your set time has elapsed.



If you press the SLEEP key during SLEEP operation, the display will show the time remaining till power turns off.

⑧ CD/VDP operation keys

▶ ·····················	CD Playback (AUTO FUNCTION)
DISC ···················	CD DISC selection
■ ······················	CD Stop
❚❚ ·····················	CD Pause
|◀◀, ▶▶| ·········	CD Track search
PROGRAM ·········	CD Program

[When used with the SHIFT key]

▶ ·····················	VDP playback
DISC SIDE ·········	VDP disc side selection
◀◀, ▶▶············	Scan: ▶▶forward, ◀◀reverse
❚❚ ·····················	VDP Pause
DISPLAY CALL ···	VDP Display ON/OFF

⑨ DELAY TIME

Use with the SHIFT key.
For operating surround delay time selection.

9. SPECIFICATIONS

Amplifier Section

Continuous Average Power Output is 125 watts* per channel, min., at 8 ohms from 20 Hertz to 20,000 Hertz with no more than 0.09% total harmonic distortion.**

Input (Sensitivity/impedance)	
PHONO MM	2.5 mV/47 kΩ
CD, VIDEO/AUX	150 mV/47 kΩ
Frequency Response	
PHONO MM	20 Hz to 20,000 Hz±2 dB
CD, VIDEO/AUX	20 Hz to 50,000 Hz±3 dB
Signal-to-Noise Ratio (IHF, short circuited, A network)	
PHONO MM	72 dB
CD, VIDEO/AUX	90 dB
Graphic Equalizer frequency band	100 Hz, 330 Hz, 1 kHz, 3.3 kHz, 10 kHz, ±8 dB

* *Measured pursuant to the Federal Trade Commission's Trade Regulation rule on Power Output Claims for Amplifier.*

** *Mesured by Audio Spectrum Analizer.*

FM Tuner Section

Frequency range	87.5 MHz to 108 MHz
Usable Sensitivity	14.2dBf, IHF (1.4 μV/75 ohms)
50 dB Quieting Sensitivity	Mono: 20 dBf (2.7 μV/75 ohms)
Signal-to-Noise Ratio (IHF, 85 dBf Input)	Mono:70 dB Stereo:67 dB
Stereo Separation	43 dB(1 kHz)
Frequency Response	20 Hz to 15 kHz $^{+1.0}_{-1.5}$ dB
Antenna Input	75Ω unbalanced 300Ω balanced

AM Tuner Section

Frequency range	530 kHz to 1,700 kHz
Sensitivity (IHF, Loop antenna)	385μV/m
Antenna	Loop Antenna

Cassette Deck Section

Systems	4 track, 2-channel stereo
Heads	Recording/playback head × 1 Playback head × 1 Erasing head × 1
Motor	DC servo 2 speed motor × 2
Wow and Flutter	0.09% (WRMS)
Fast Winding Time	Approximately 95 seconds (C-60 tape)
Frequency Response	
−20 dB recording:	
Normal tape	35 Hz to 14,000 Hz ± 6 dB
CrO_2	35 Hz to 15,000 Hz ± 6 dB
Signal-to-Nise Ratio	
Dolby NR OFF	50 dB
Noise Reduction Effect	
Dolby B type NR ON	More than 10 dB (at 5 kHz)

Miscellaneous

Power requirements	
U.S. and Canadian models	AC 120 V, 60Hz
Australian models	a.c. 240 Volts ~ 50 Hz
Multi-voltage model	AC 110 V/120-127 V/220 V/240 V (switchable), 50/60 Hz
Power Consumption	
U.S. and Canadian models	380 W, 495 VA
Australian and Multi-voltage models	680 W
Dimensions	420(W) × 349.5(H) × 303(D) mm 16-9/16(W) × 13-3/4(H) × 11-15/16(D) in
Weight (without package)	11.2 kg (24 lb 11 oz)

Furnished Parts

FM T-type Antenna	1
AM Loop Antenna	1
Operating Instructions	1
Remote control unit	1
Dry cell batteries	2
RX-731S:	
Operating instructions for the remote control unit	1

Accessories

EP Adaptor	1

NOTE:
Specifications and the design subject to possible modifications without notice due to improvements.